



CRP 807 : PROFESSIONAL STUDIO

CITY AND REGIONAL PLANNING
FALL 2012



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Executive Summary

Over the past several years, Greenville has taken great strides in transforming the city into an attractive place to live, work, and play. Today, the city boasts a vibrant downtown and provides various amenities for residents and visitors alike. Despite such improvements, there are still challenges to overcome. While the city as a whole has made a marked transformation, several neighborhoods are still in need of assistance.

The West Side, which includes portions of the Pete Hollis corridor as well as West Washington and Pendleton Streets, is one such neighborhood in need. With a high unemployment rate, ailing housing stock, and a dearth of businesses, the West Side requires a plan to revitalize what has been and will continue to be a great community.

This report details a plan to do just that—address the challenges of the West Side while embracing the neighborhood’s spirit and character. The recommendations in this report are a culmination of research and outreach activities involving students from Clemson University’s City and Regional Planning Program, officials from the City of Greenville, and stakeholders vested in the success of the West Side. The report is organized into various chapters or sections which cover economic development, policy, transportation, parks/trails, and housing. A brief summary of the recommendations for each section are provided below:

Housing:

- Revitalize an ailing housing stock by establishing tax incentives, historic building credits, and/or incentivized zoning.
- Keep housing affordable for residents in the West Side Neighborhood so as to avoid displacement of current residents.

Transportation:

- Diversify transportation modes to increase mobility for residents of the West Side.
- Promote interconnectivity of various modes of transportation and re-connect the West Side with other neighborhoods in the City of Greenville.

Policy (Transit-Oriented Development):

- Facilitate the development of transit-oriented economic development (TOeD) by expanding mixed-use development spaces and embracing transportation opportunities.
- Utilize zoning and land use controls to promote more transit-oriented economic development and growth.

Economic Development:

- Promote economic development through the establishment of business incubators, studio space, and low-cost retail and business spaces.
- Tailor businesses in the West Side to fit the needs of current citizens while also attracting new citizens.
- Capitalize on existing assets in the neighborhood to draw visitors and patrons to the West Side.

Parks and Trails:

- Use the Swamp Rabbit Trail as a 'spine' to connect Greenville's various neighborhoods.
- Fuse each of Greenville's neighborhoods, including the West Side, to the Swamp Rabbit Trail.
- Where each neighborhood fuses to the trail, establish be a 'node' with restrooms, picnic shelters, etc. so as to create a gathering spot and a place for each neighborhood to make their 'own'.

Important to note is the fact that the goals, objectives, and recommendations within each chapter are not mutually exclusive—the means and ends described in each chapter dovetail with various aspects from other chapters. Therefore, this report represents a holistic approach to making improvements to the West Side. Through the efforts of the Clemson students, City of Greenville, and community participants, then, a real potential to create a vibrant, viable, and interconnected West Side exists.



HOUSING

Utkarsh Patil
Kyle Prebble

Housing

'Connections for Sustainability' is a \$1.8 million grant that has been provided to City of Greenville, by the Department of Housing and Urban Development and the US Department of Transportation. The purpose of this grant is to help link Greenville's Neighborhoods and jobs and promote open space. A portion of the grant is used to help improve the housing stock in three special emphasis neighborhoods in Greenville's Westside. The three special emphasis neighborhoods are West Greenville, Southern side and West End.

The City of Greenville's Community Development division is currently working to revitalize Greenville's West side and its housing stock. Community Development is taking three major steps to do so; demolition of dilapidated houses, acquisition of vacant property and working with code enforcement and police so these strategies can be implemented. All of this is being done to enhance the overall aesthetics of the neighborhood. Driving through Greenville's Westside, current rehabilitation projects can already be seen in many areas.

The Ultimate goal is to help improve the entirety of the three special emphasis neighborhoods. Rehabilitation is important not only because it visually improves the quality of the neighborhood but it is also vital to upholding the pre-existing character of the neighborhood. New construction is also a key component to revitalization, but it is important to make sure the newly built houses fit the existing fabric.

Housing types in West side Greenville: New and rehabilitated



Pre existing character (City of Greenville)



Rehabilitated Housing (Google)



Duplex Housing (City of Greenville)

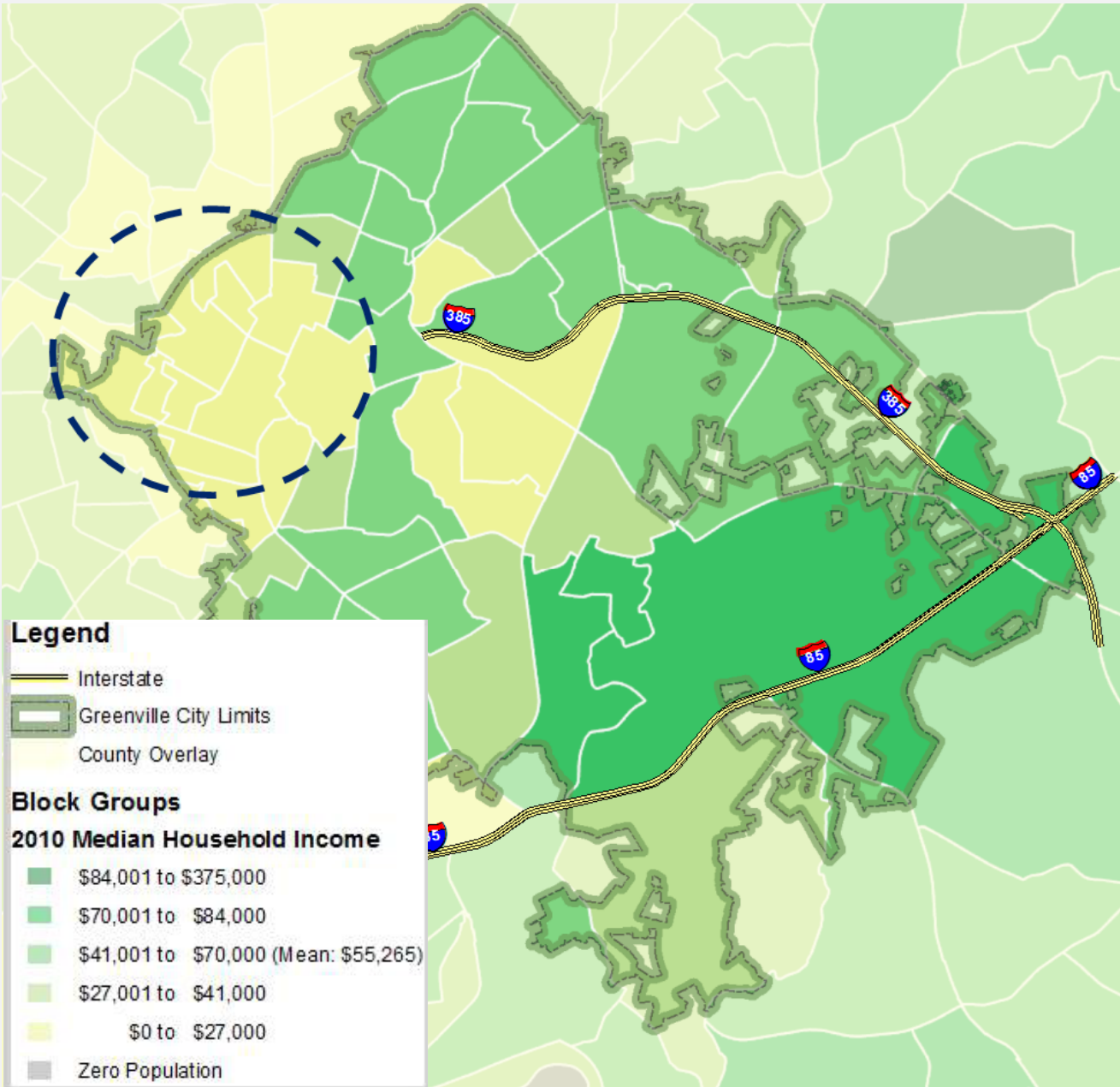
Selection of Study Area

Based on studies done for the City of Greenville, there are certain maps generated. This helped to finalize the area that needed the most attention. As can be seen, area encircled in Blue is the study area. The study area performs poorly as compared to the rest of the city.

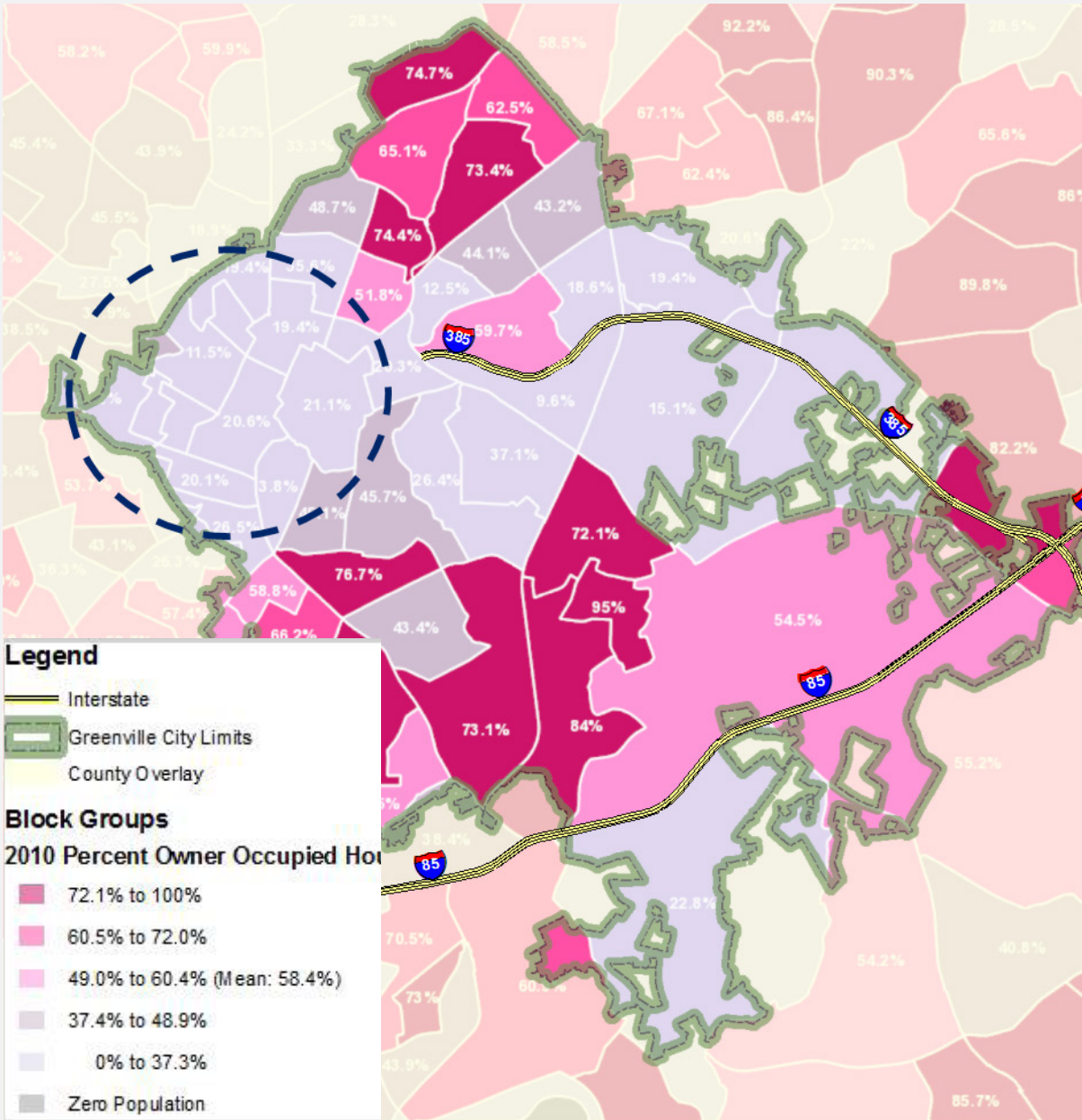
The important indicators for deciding the vitality and health of an area are the Median Household Income, Percent Owner Occupied Housing and Percent Vacant Housing. The Median Household Income for the West side area is below \$27,000 as of 2010, whereas the mean for City of Greenville is \$55,000. This indicates that the area is in serious need of attention to increase the number of jobs. As regards, the other factor that is Percent Owner occupied Housing, a key fact to be considered is that the area has been traditionally rental housing. Good relations with the landlords meant that historically rental housing has been carried on in many households in the West side and Greenville. However, West side still under performs as compared to the rest of the city with 0-37.3 percent owner occupied housing compared to the mean of 55.4 percent for the city.

Based on these factors, the West side area of city of Greenville was selected for the study. The following maps show the relative conditions of the study area compared to the rest of the city.

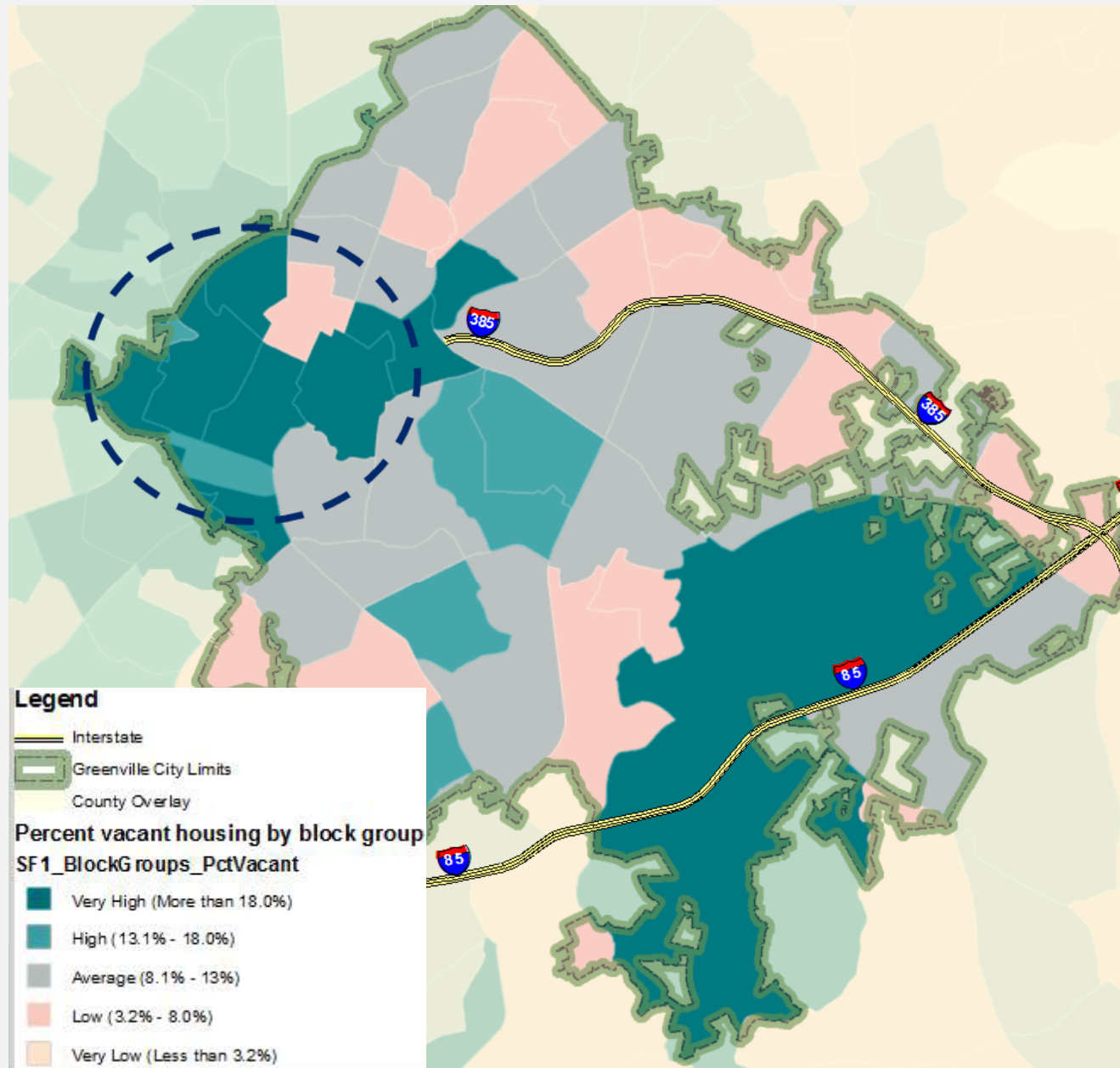
Median Household Income:



Percent Owner Occupied Housing:



Percent Vacant Housing:



S.W.O.T. Analysis

STRENGTHS	<ul style="list-style-type: none"> • Proactive Local Government • Community Amenities/ Aesthetics • Downtown • Housing Stock 	<ul style="list-style-type: none"> • Schools/Education • <u>Walkability</u> • Mixed Income Neighborhoods
WEAKNESSES	<ul style="list-style-type: none"> • Vacant/ Dilapidated Housing • Transportation/Connectivity • Lack of Affordable Housing 	<ul style="list-style-type: none"> • Variety of Housing Stock • Infrastructure • Access to Food/Retail
OPPORTUNITIES	<ul style="list-style-type: none"> • Sustainability • Neighborhood Redevelopment • Incentive Investment • Improve Mobility/Transportation 	<ul style="list-style-type: none"> • Increase Housing Diversity • Apply Appropriate Densities
THREATS	<ul style="list-style-type: none"> • Traffic Congestion • Non-urban Development • Gentrification 	<ul style="list-style-type: none"> • Economies/Movement of Jobs • <u>Nimbyism</u> • Safety

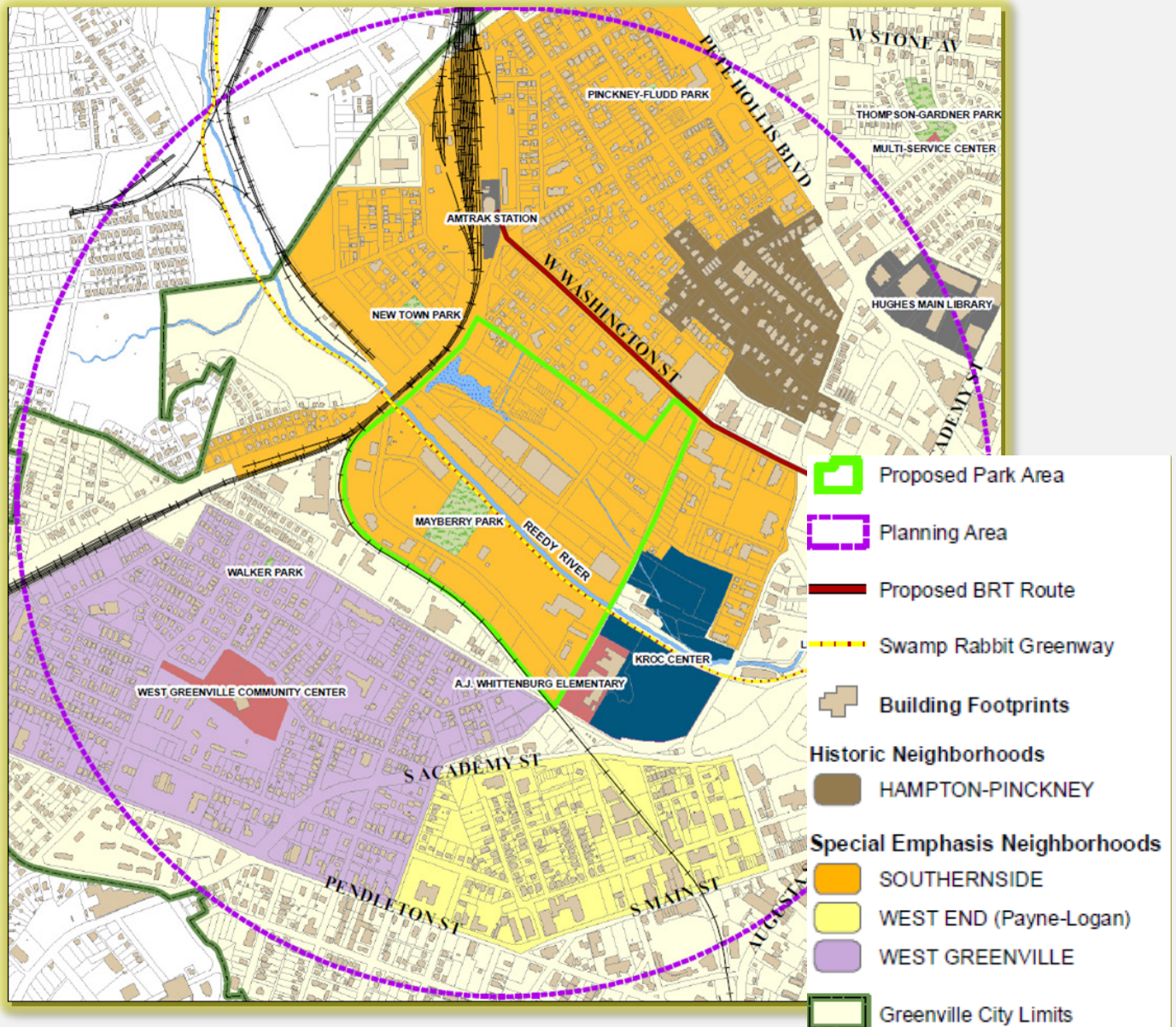
Study Area and Strategies

Based on the previously mentioned criteria the study area of the West Side was selected which comprises three special emphasis neighborhoods including Southern Side, West End and West Greenville. The city of Greenville has conducted a SWOT (Strengths, Weaknesses, Opportunities and Constraints) Analysis and came up with the results displayed on the previous page.

The key weaknesses related to the area, as pointed out by the SWOT analysis, are the vacant dilapidated housing, lack of transportation connectivity and lack of affordable housing. There are also some threats of gentrification associated with the revitalization effort.

With the goal of improving these three special emphasis neighborhoods, certain strategies are proposed and can be applied to the West Side. Some of the outline strategies proposed for the revitalization of the West Side include infill and compact development, preservation of community character, historic preservation and other strategies like tax incentives.

West Side Study Area:



Infill and Compact Development:

There are three equally important goals that the City of Greenville's Community Development division hopes to provide:

1. People deserve and need decent, safe and affordable housing.
2. Provide a suitable living environment which people desire.
3. Expand economic opportunities throughout the target area.

Infill Housing:

The first objective to achieve these goals can be done through infill housing. Using infill can create a diversity of housing stock throughout the special emphasis neighborhoods. Infill can be used to create not only single family units but also forms of multifamily including, duplexes, triplexes, and small apartment buildings. These options can increase density while still preserving the character of the neighborhoods. Gaps in the neighborhood structure can be filled to create affordable housing options that provide a denser community and work to keep out negative externalities throughout the neighborhood. Infill projects can help rebuild community by adding more neighbors and community institutions. This also helps stabilize property values in the neighborhood. At the same time infill can be used to renew the housing stock and reestablish a sense of place and aesthetic value to the neighborhood. Redeveloping underutilized buildings and sites should be part of a community development and growth management program that can include many strategies.



Compact Development:

The second achievable goal is through the construction of compact development. Compact development helps to add more “eyes on the street.” This can be beneficial to a neighborhood in order to keep down the crime rate and be a deterrent for future criminals. Compact development also better utilizes the land because it allows room for open space that can be used for parks and recreation.

The concept of compact development also allows for shorter walking distance between housing and amenities. In doing this, local retail is more convenient can economically affect the immediate community members. People can not only gain easier access to jobs but at the same time pedestrians will be more likely to shop at stores in close proximity.



Pocket Neighborhoods:

Compact development can be used through the creation of pocket neighborhoods as well. Pocket neighborhoods are a clustered group of homes even joined back yards which have a clear sense of community and stewardship. With a joined or shared lot neighbors can build friendships or lend a helping hand more easily.

The shared open space can also provide a safe environment for children to play. Not only is the environment safe because of the absence of cars or other potential hazards but less supervision is required. A single parent or guardian is all that may be necessary to supervise a group of children.

A possibility that can be used to help infill vacant lots, is through housing built off site. An example of a community that has used this method is Noji Gardens in Seattle, Washington. The Key mission of the Noji Gardens project was to provide affordable homeownership opportunities for first time home buyers. Part of the success of this project was due to the quality of the off-site built homes. These homes did not look like pre-manufactured housing but

instead resembled homes that were built on site and fit the neighborhood fabric. Single family homes as well as various forms of multifamily housing were used in the project.

The key financial players in the creation of Noji Gardens were the Department of Housing Development (Seattle dept or HUD) and a non-profit group called Home Sight.

Creating financing was used as a key to affordability. One of the ways in which the financing costs were lowered was by the construction time. A construction team can put together four box units which equates to two

units in as little as two hours. Another way in which they reduced financing costs was by following performance-based HUD codes that allowed for the use of innovative materials and construction methods. All of these methods combined ultimately lowered the housing costs.

Many of the above ideas can be transferred to West Greenville as well as working toward the twelve units per acre at Noji Gardens. Noji Gardens is a community that was compiled completely of pre manufactured units but can still be a model for pockets in the West side.



Pre Fabricated House (Zillow.com)



Pre Fabricated House (landcast.com)

Preservation of Community Character

An important aspect that should not be ignored and was important to the housing focus groups is preservation of community character and heritage. Heritage can be broadly classified into two types: Tangible and Intangible. Tangible heritage involves all the physical aspects of a community such as building character, use of materials, textures and street types. Intangible heritage involves many aspects such as cultural heritage and social interactions. Tangible heritage can be preserved easily through guidelines for development. However, intangible heritage is fragile and can be lost abruptly, even by subtle changes in the neighborhood. Baltimore, though a big city compared to Greenville, has a successful program to enhance intangible heritage. The Baltimore MECU neighborhood event grant provides funds for cultural events up to \$1,000.



One of the key factors of concern as expressed by the community members in Greenville was a method to improve the confidence of investors, to invest in the area. This issue can be addressed by a promotion campaign of the neighborhood. This can be in the form of logo design, publicity and design of maps and other media. This will shed some light on the community and interest potential investors. Some of the examples of this are the measures and campaigns started by Downtown Anderson. Downtown Anderson used the skills of Arnett Muldrow and Associates to come up with a promotion campaign for its historic Downtown.

Historic Preservation

Historic Preservation is the act to preserve, conserve and protect buildings, as defined by the Maryland Association of Historic District Commissions. Dubuque Iowa established visual Guidelines to preserve the community character. Some of these guidelines included using brick materials and constructing types of housing similar to the existing structures. In terms of intangible heritage, Dubuque organized outdoor cultural events such as fairs to preserve the cultural character. Public art was also used to preserve the character of the community.

Another city using similar strategies is Tucson Arizona. Tucson sought to preserve both tangible and intangible heritage. To preserve tangible heritage, tax incentives were given to historic buildings which in turn reduced annual property taxes for some up to 50%. With this preservation taking place, assessed property values went up by 12.8% in the city historic preservation zone. Intangible heritage, such as Native American folklore, traditions, knowledge, language and music have passed down through generations.

“The greenest building is the one that’s already built... We cannot build our way to sustainability; we must conserve our way to it.”
– Elefante, 2007

Many of the strategies used to battle challenges in Tucson and Dubuque are applicable to the West Side of Greenville. Some challenges include deterioration of historic properties through neglect. Historic properties get neglected because of the costs involved in their upkeep. There is also a poor awareness about the historic assets in Greenville amongst the public. Some of the current regulations do not support preservation and instead can hinder or discourage it.

Some of the opportunities that can be applicable or transferred to Greenville are to introduce neighborhood Preservation Zones for compatible Infill. Tools like Transfer of Development Rights can be used for balanced development. Transferring development rights is a regulatory strategy that allows

private market forces to accomplish two smart growth objectives. Open space is protected for water supply, agricultural, habitat, recreational, or other purposes by the transfer of some or all of the development that would otherwise have occurred in these susceptible places to more fitting locations. Other locations, such as city and town centers or unoccupied properties, become more lively and successful as the development potential from the protected resource areas is conveyed to them. West Greenville could receive some of this development instead of it going to greenfields outside the city.



Downtown Greenville (CNBC cities)

Gentrification

Another topic of interest to the Housing Focus team and one which repeatedly came up in Focus Group meetings was Gentrification.

Gentrification definition:

“The process of renewal and rebuilding accompanying the influx of middle-class or affluent people into deteriorating areas that often displaces poorer residents” Merriam Webster dictionary.

Gentrification has many good factors, if it proceeds without widespread displacement. It gives the opportunity to increase the socioeconomic aspects and can also help in racial and ethnic integration. Displacement occurs when the conditions are not within the owners or renter’s hands and it becomes unavoidable or unaffordable for those with little disposable income. Displacement is when a segment of a population is forced to move because of factors such as economic development. The population that is displaced is forced to move because of the increase in the cost of living.

Case studies are examined in an effort to see how other areas have battled displacement in the face of gentrification. They are also being looked at to see how these areas have successfully implemented revitalization and preservation efforts. Reynoldstown, Figueroa Corridor and Uptown are three prime examples of how neighborhoods have successfully tried to mitigate displacement and successfully revitalize the areas. All three of these case studies made successful efforts in making housing more affordable.

Case Studies: Reynoldstown, GA

Reynoldstown, Georgia was one of the first free African American neighborhoods in Atlanta, and was primarily middle class workers. They were mainly employed by the steel and cotton factories. After the closing of these factories most of the residents were unemployed and the conditions in the neighborhood started to deteriorate. Similar to many other urban neighborhoods, the potential for Reynoldstown was soon realized by developers, house-flippers and young professionals seeking to be closer to downtown jobs. Currently Reynoldstown is in the early to mid-stage of gentrification. There were many key strategies used in the improvement by the Reynoldstown Revitalization Corporation (RRC). The RRC helped home owners to rehabilitate their homes and built affordable single and multi-family rental housing projects. The RRC also offered an individual development account program and works toward crime reduction and sponsors an annual festival. RRC also encourages current residents to remain in the neighborhood and improve their properties and at the same time attracting new residents.

The priorities of the RRC were to encourage the incumbent residents and improve and repair their existing homes, increase neighborhood safety and reduce the number of abandoned lots. With the help of Bank of America Community Development Corporation as their partner, RRC purchased vacant properties of land. RRC has shown a significant difference in the pricing of homes, with their prices being between \$135,000 and \$181,000 and the regular market prices for the same were around \$270,000. They protected the properties with a special clause that puts a third party lien on the property for 10 years. This was done to ensure homeowners would not buy the houses and then flip them as an investment. This can be an important strategy for Greenville to look at as there have been repeated concerns expressed regarding these issues in the Focus team meetings.

As a result of the successful strategies employed by the Reynoldstown Revitalization Corporation, the prices of the lots have increased from \$5,000 to \$30,000 in a period of five years.

Case Studies: Figueroa Corridor, Los Angeles

Figueroa corridor in Los Angeles, California is another area that is analyzed. In 1978, a rent stabilization ordinance (RSO) was passed to protect renters from drastic increases in rent and simultaneously, allowed landlords to receive reasonable profits from their properties. It is applicable to most of the houses, so long as one had rented a house for more than 60 days. The amount rent could increase each year was calculated by the Consumer Price Index. As a way of slowing long term resident displacement, a Land Trust was used. A Land Trust is a private or nonprofit organisation with a goal of conserving land. The land trust was used to stabilize the community by helping incumbent residents to become homeowners. This also helps improve the quality of life and an array of home ownership opportunities. Housing Practitioners are also considering other programs with private developers such as inclusionary zoning and a Housing trust Fund.



Figueroa Corridor, LA (humanandnatural.com)

Case Studies: Uptown Chicago, IL



Chicago skyline (braco.net)



Uptown Chicago (lucidrealty.com)

Uptown Chicago is located 8 miles north of Downtown Chicago, Illinois along Lake Michigan. In the 1940s and 1950 Uptown attracted African Americans, southern whites and Native Americans because of the affordable housing. After World War II there was an extreme housing shortage and most of the single family homes in the area were converted into multi-family units. Then throughout the 1960s and 1970s, during the federal urban renewal period there was a twenty-five percent reduction in housing stock. As gentrification occurred, prices for single family detached homes, condominiums and large apartments increased significantly but rental housing remained affordable. The sales price for single family detached homes increased thirty three percent between 1990 and 2000. Eighteen percent of the housing is subsidized units, but residents feared that landlords were opting out of section 8 housing programs. The residents claimed that they did not benefit from gentrification but it was the landlords and developers who did. Many of the current residents were faced with higher housing costs and possible expiring section 8 contracts.

One strategy Chicago used to help deter displacement was through voluntary inclusionary zoning. This was done through the Chicago partnership For Affordable Housing CFAN. This was done through the developers and Alderman of each ward. The developers and aldermen would negotiate a number of affordable housing units for new development that would usually range from ten to twenty percent.

For residents to be eligible they could earn no more than a 100% of the area's median income and at the same time be a first time home buyer and not have bought a house in the last three years. To offset the money that the developers would lose from the programs, the city waived off the building unit fee which could be up to \$10,000 for a single unit and the city would help with the site improvement budget. Additional strategies in this area were done by non-profits working in Uptown to retain existing affordable housing. Organization of the North East helped with the purchase of 10 Section 8 buildings. They also converted apartment buildings into limited equity co-ops which created affordable housing. The James Adams senior caucus along with two other non-profit organizations purchased city land in uptown and built 83 affordable housing units just for senior citizens. Cook county Assessor's office also offers three different tax incentives to retain multi-family units throughout Chicago. All three of these tax incentives were targeted to medium and low income households and helped stop displacement with affordable housing.

Strategies Applicable to Greenville

Based on the analysis of different neighborhood revitalization case studies and their applications, certain strategies are selected that would be applicable in the context of the study area. They are as follows:

- * Recapture clause can be put on the houses that are funded so that the concerns about flipping can be addressed.
- * Community building should be given primary importance.
- * Tax Incentives
- * Historic Building Credits.
- * Incentive Zoning
- * Job opportunity
- * Economic development and preservation
- * Non profits , organizations and bank support

Housing in Greenville's Westside can be revitalized through many efforts mentioned above such as infill and compact development. Compact development allows for the creation of housing at cheaper rates and if implemented correctly can help to compact the area without disturbing the preexisting fabric of the neighborhood. Infill development can be used to fill in the vacant lots and houses deemed uninhabitable or beyond repair. Many of the houses in Greenville's Westside can be saved through revitalization efforts. Some efforts are already in action but more can be done as seen in the case studies. All of the case studies serve as examples for different strategies that West Greenville can use to combat displacement in the face of gentrification. Different strategies such as inclusionary zoning and tax incentives are being used to help promote affordable housing in these different cities. Greenville can adopt policies such as the ones used in these cities to help fight off displacement in areas that need to keep affordable housing. Tucson and Dubuque can be used as prime examples of how other areas have taken initiatives to preserve the heritage of their area through tax incentives and cultural events.



TRANSPORTATION

Raven Campbell
Matt Vinke

Transportation

Transportation is a central component of functioning cities and neighborhoods. Transportation helps people get from point A to point B, including by private car, walking, cycling, and taking transit. For this chapter, however, the primary focus is public transit. Public transit helps bring people who either choose not to own or do not have the resources to own a private automobile to work, church, school, and any other social function outside the home imaginable. It also provides services to those who own cars, but choose other options for reasons of parking, congestion, or personal preference. A good bus system can help promote sustainable growth in neighborhoods and provide more mobility further out than would be possible with sidewalks or bikeways alone. Upgrading the Greenville transit system is therefore important to people of the Westside who otherwise may lack opportunities for jobs, education, and recreation. These Westside stakeholders participated in monthly transportation focus group meetings to help address some of these connection issues.

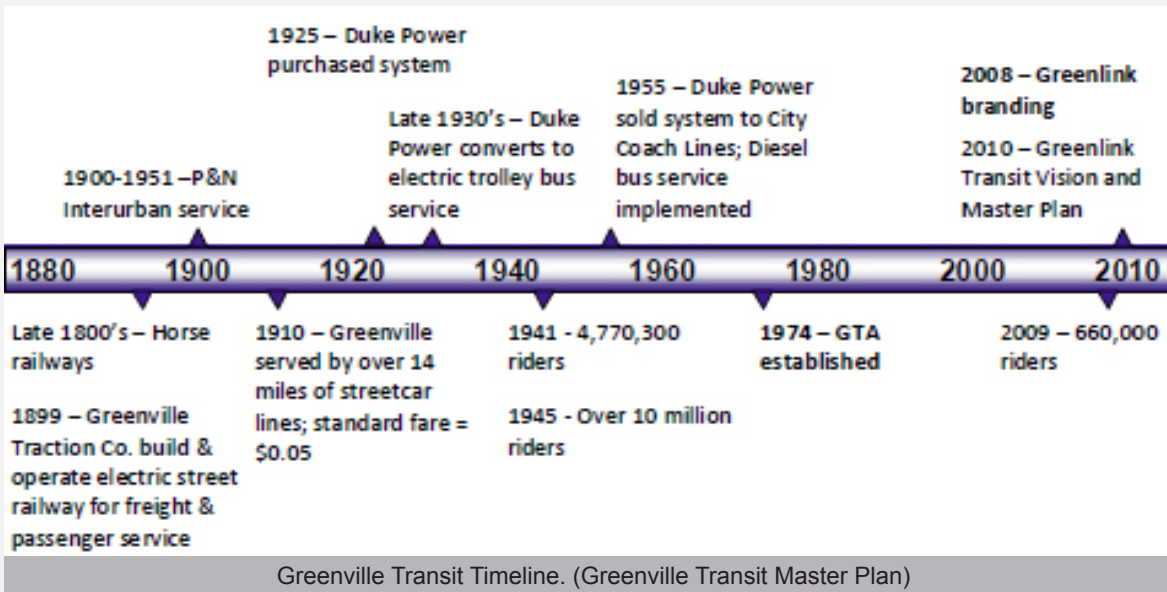


The Greenlink Transfer Center (Raven Campbell)

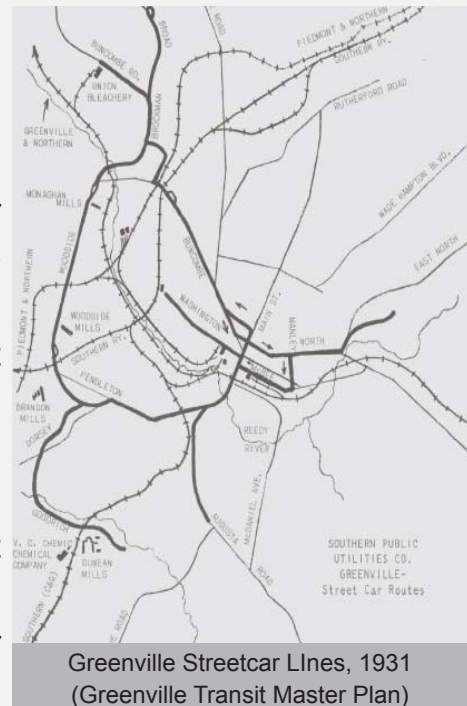


The Greenlink Transfer Center (Raven Campbell)

History of Transit in Greenville



Public Transit in Greenville began with horse-drawn railways in the late 1800s. This technology quickly shifted to electric streetcars around the turn of the century. By 1907, the city of Greenville had fourteen miles of electric streetcar tracks, covering most of the downtown area. Duke Power took over the Greenville streetcar system in 1926, then in the 1930s, Duke Power converted the electric streetcars into electric trolleybuses. In the early 1950s, Duke Power sold the system to City Coach Lines as a result of being unable to make a profit. City Coach lines converted the trolleybuses to diesel buses. The system's financial woes continued. In 1974, with City Coach Lines unable to operate the system profitably, the recently established Greenville Transit Authority took over the system, making it a public agency. The agency was renamed Greenlink in 2008 (Greenville Transit Master Plan, 2010).



Greenville: Existing Conditions

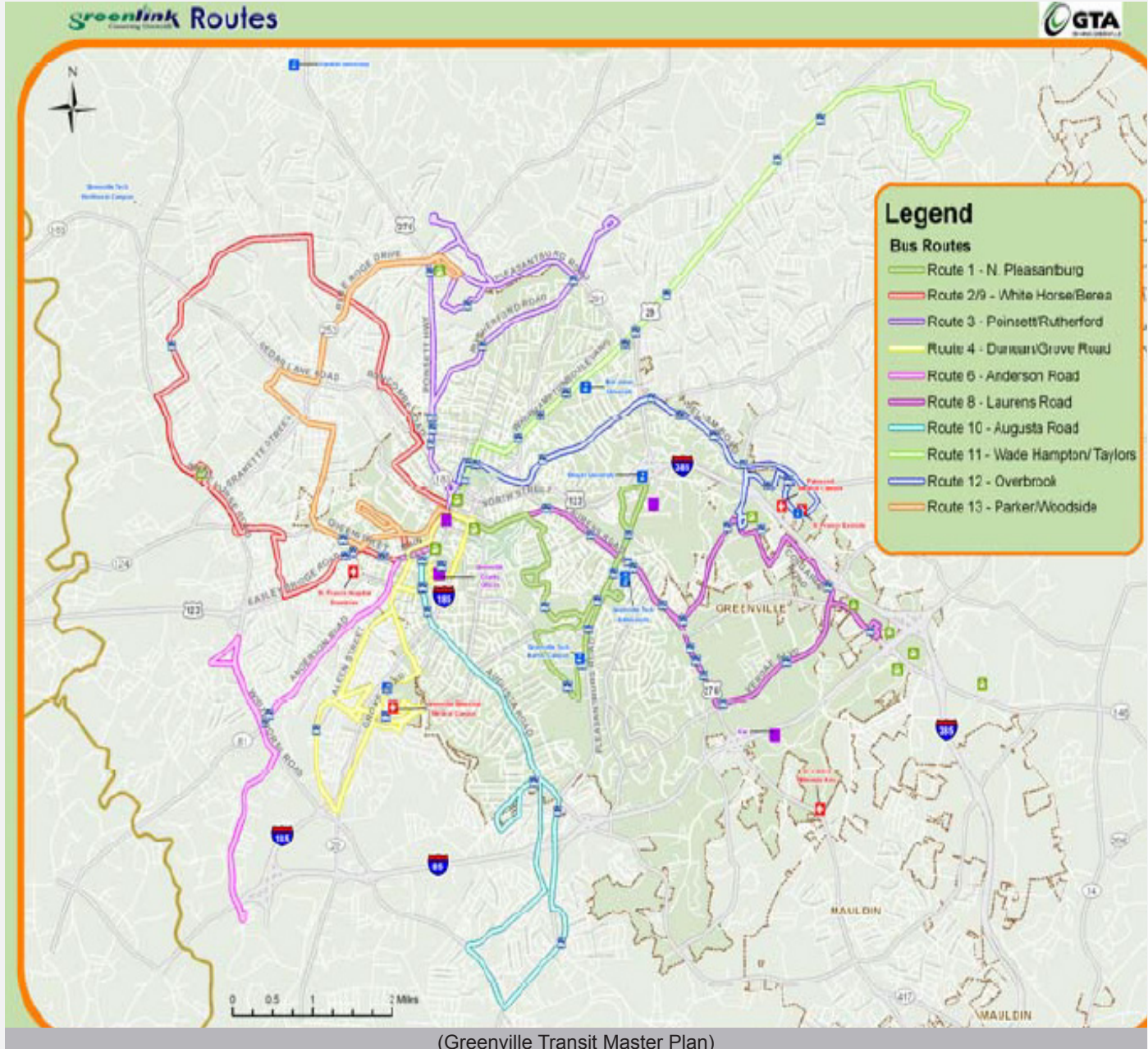
Today, Greenlink hosts 11 bus routes that run throughout the city, pictured on the next page. All of the routes have hourly frequencies, and all bus transfers occur at the Greenlink Transfer Center in downtown Greenville. The buses are on a pulse timetable, which means that they are all timed to leave at approximately the same time, and also to enable predictable transfers. The routes run between the hours of 5:30 AM and 7:30 PM every day except Sunday. Greenlink has a stop near the Amtrak station, but does not run routes to the GSP airport, and lacks connections to many suburbs and destinations outside the City.

Some previously reported strengths from the Greenville Transit Master Plan include recent improvements made to the system, such as installing new shelters and stops, and expanding hours. In addition, the recently adopted Bike Master Plan laid out exactly where future improvements will be made. Among the transportation weaknesses in the Greenville system is its limited span of time service: In Transit Master Plan meetings, residents stated that Sunday service is needed, as well as service after 7:30 PM. The hourly frequency of the system was also identified as a barrier to recruiting new riders. The bike plan has yet to be implemented, so its impacts are not fully known. Finally, the existing transit system does not enable connections with Amtrak. The Charlotte-DC-New York bound trip arrives at 11 PM, long after the Greenlink system has shut its doors for the night, and the Atlanta-New Orleans trip leaves at 5 AM, thirty minutes before Greenlink opens for the day.

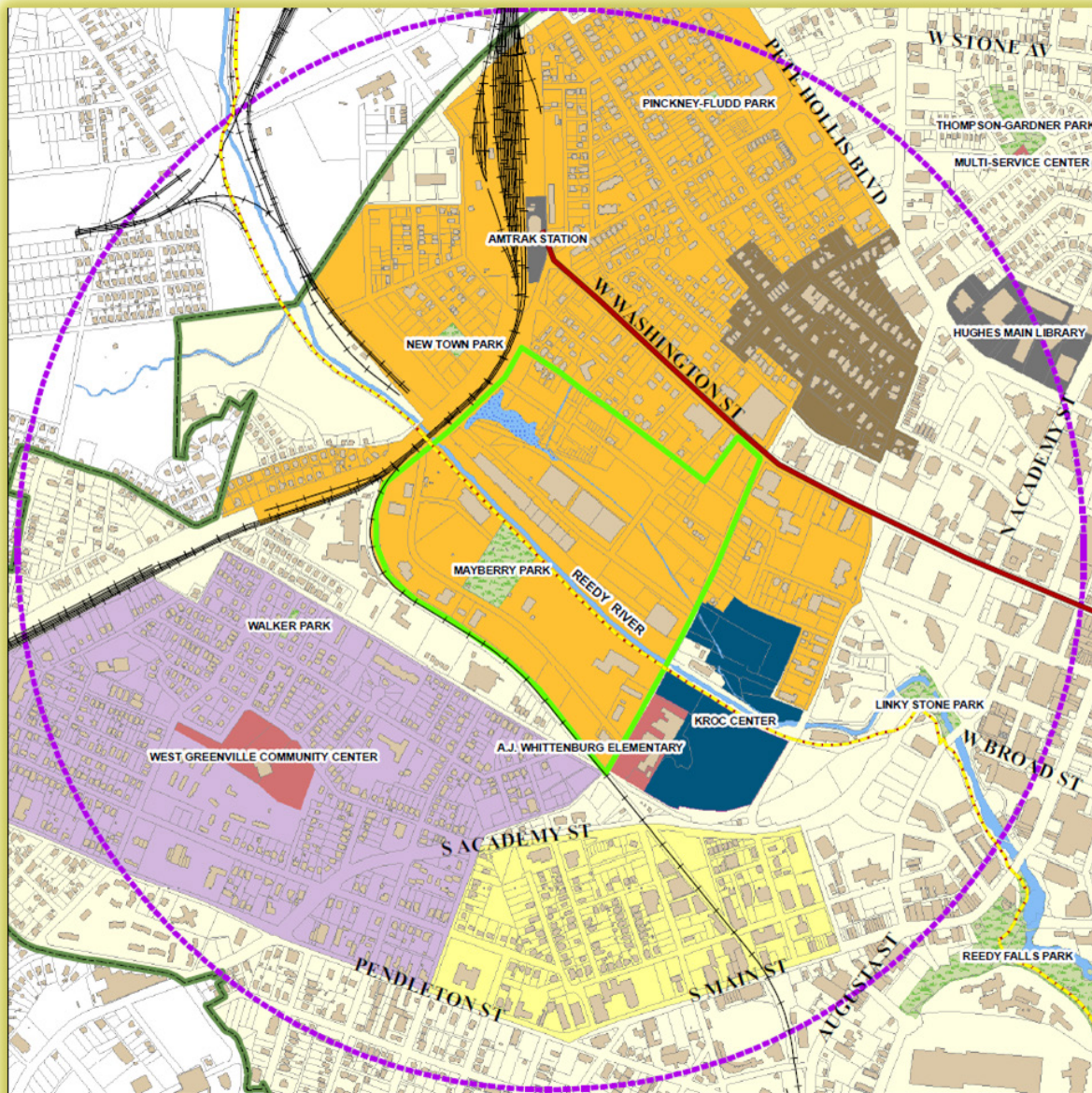


Bus-Bike Connections (Raven Campbell)

Current Greenlink Routes



Westside Study Area



Westside: Existing Conditions

In the Westside area (pictured on the left), most residents are within a half mile of a bus stop. Most roads have sidewalks, although the quality of these sidewalks has been a subject of neighborhood improvement plans (Westside Neighborhood Plan, 2008). Bike infrastructure currently exists in the form of the Swamp Rabbit Trail and bike lanes along Pendleton St. and River St. The Westside is home to the Amtrak station, and the downtown Greenlink Transfer Center is also within the one-mile radius of the study area, albeit on the very edge.

The Westside's strengths include an extensive sidewalk network and small city blocks, which make the area inherently more walkable than other parts of the city. The presence of the Amtrak station within the West Greenville Study Area improves mobility for the neighborhoods' residents. The area's weaknesses are that some of the sidewalks could use improvements, as per the Westside Neighborhood Plan. The area also has connection issues around the Reedy River and the railroad tracks because few opportunities to cross these features currently exist.



West Washington Street, from Amtrak Station (Raven Campbell)

Greenville Metro Population: 636,986

Planned Line Length: 7.1 Miles

Planned Station Spacing: .7 Miles

Planned Amenities: Intelligent Transit Systems, Off-Board Payment, Station Decoration, Info Kiosks, Multimodal Access

Planned Peak Headways: 10 minutes

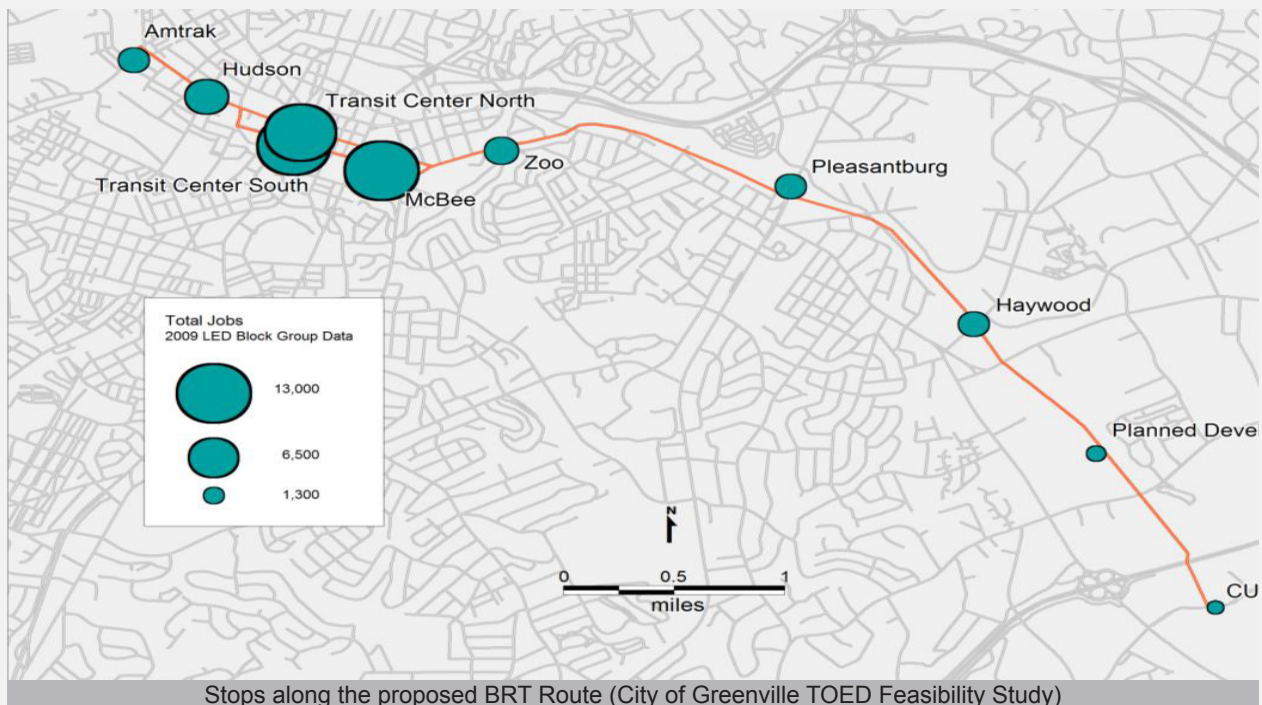
Planned Right of Way: Exclusive, Partially Grade-Separated

Planned Opening: 2016

Future Plans for Greenville

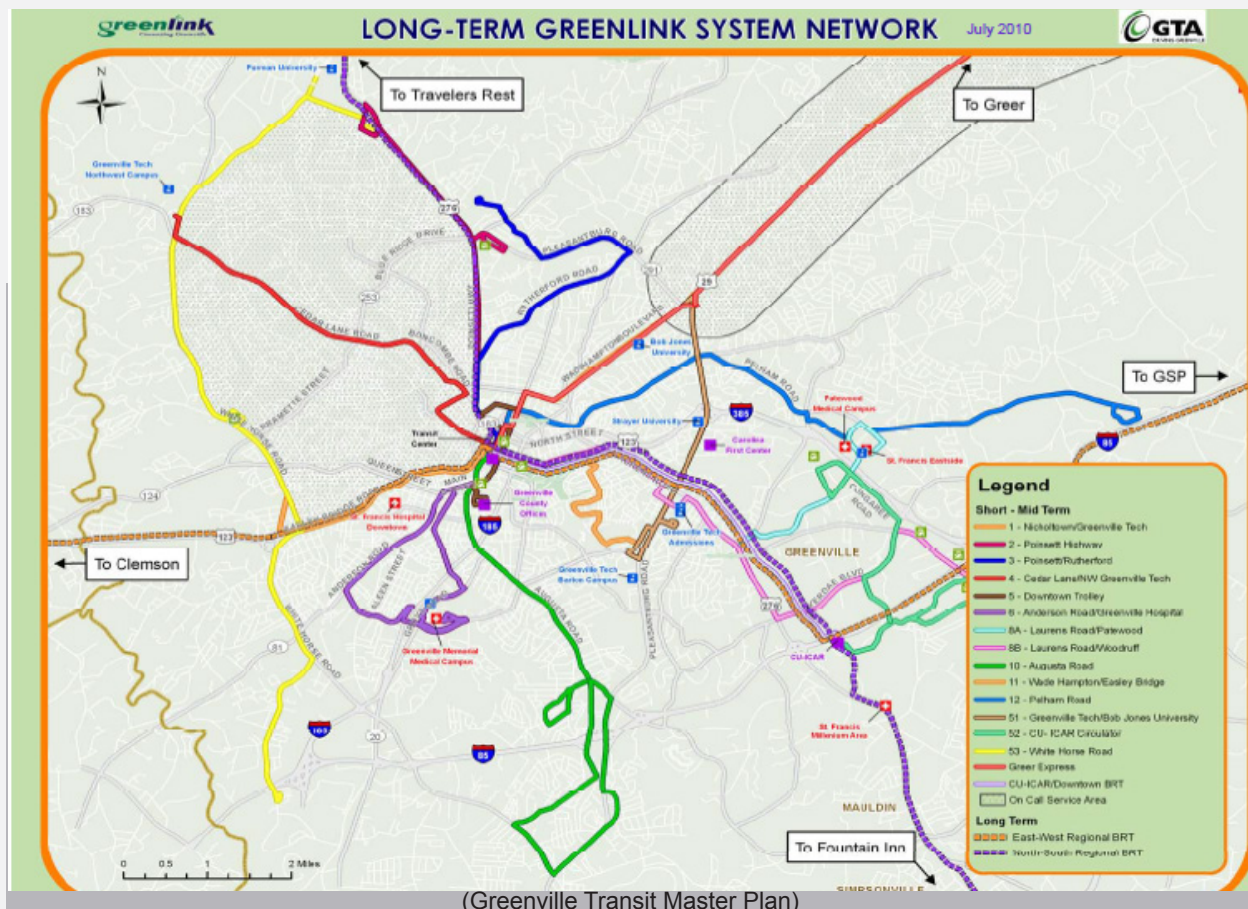
Greenville has expressed interest in modes of travel that go beyond the existing city bus network. In 2010, the city commissioned a study to determine the feasibility of various modes of transit for the city, including: commuter rail, light rail, streetcars, and Bus Rapid Transit (BRT). The study evaluated potential ridership, the costs of each mode, and the potential for synergies with economic development. Of all the modes evaluated, the study found that BRT would be the most cost-effective.

The BRT feasibility study suggested that the alignment for the proposed BRT service use an abandoned rail right of way parallel to Laurens Road, to save on capital and right of way acquisition costs. In accordance with the most current BRT theory, the route's stops are more widely spaced than a traditional bus, at about every half mile rather than every few hundred yards. There are two stops for the first segment of the system that are in the study area: the Amtrak stop and the Hudson St. stop.



There are future plans to make BRT a regional service. The system is envisioned to extend from Travelers Rest in the north to Fountain Inn to the south, as well as from Clemson in the west to Greenville-Spartanburg International Airport in the east.

In addition, Greenlink also has future plans to restructure the local bus system. This will involve converting some circular routes into radial ones. A couple of routes in the study area will be impacted by this change. For example, Route 9 will become a radial route rather than a circular one, meaning that the inner loop in the Westside neighborhood will be eliminated.



Focus Group: Meeting I

September 28, 2012:

During the first meeting, the transportation group gave a presentation on the basics of transportation systems in Greenville and of Bus Rapid Transit (BRT). This included an overview of the history of transportation in Greenville, existing transportation systems in Greenville, the features and principles of BRT, and the planned Greenville BRT route. Attendance during the meeting was relatively high, and a fair number of pertinent stakeholders showed up for the discussion. The transportation group presented during the session alongside the TOED/Policy group. There seemed to be general interest in the presentation from a variety of stakeholders, as the discussion session after the meeting involved a lot of back and forth between the participants concerning the potential impacts of BRT.

After the meeting, the stakeholders requested the transportation group to research the best examples of BRT systems around the country, and distill from those examples advice to ensure the success of BRT in Greenville. So, the transportation team researched these areas intensely, focusing on smaller cities. This eventually yielded the following case studies. The focus group also showed interest in ascertaining the impact of BRT on property values. So, the transportation group scoured the literature for the latest studies involving BRT and land use. The results of the research into property values are presented in the next section.

Case Studies: Eugene, OR: EmX

Why Eugene Matters for Greenville:

1. BRT Can Work in Small Cities

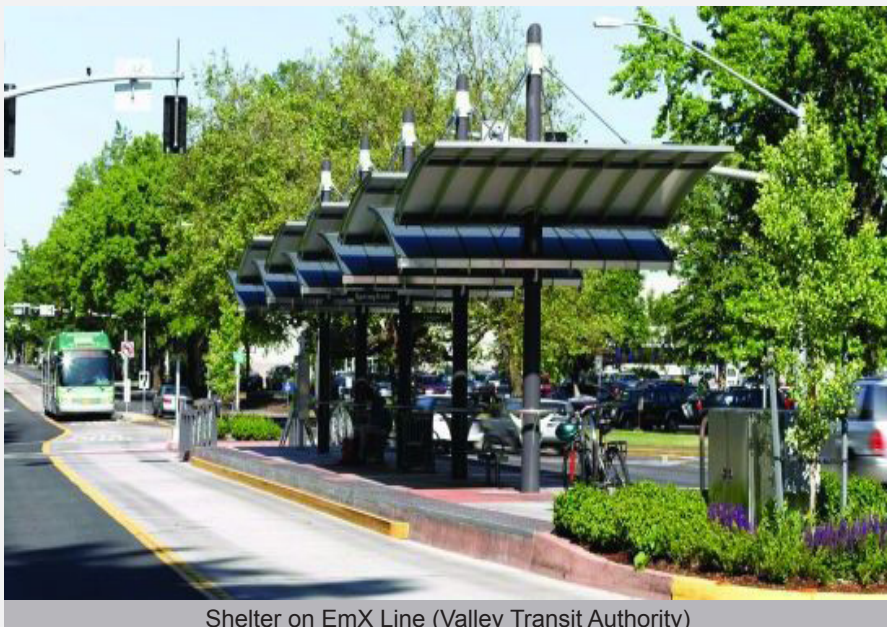
While the City of Eugene is larger than the City of Greenville, Greenville's metro area has about twice as many people as that of Eugene. The success of EmX suggests what BRT can do for Greenville. Eugene demonstrates that Greenville is not too small for BRT investment.

2. Starting Small Can Work

EmX demonstrates that Greenville's planned strategy of starting with a small initial segment can work. EmX added six more miles to the initial 4-mile segment in 2011, and a further extension of Eugene's Westside is in planning stages.

3. Small Cities Can Get Big Ridership Gains

The success of the EmX also exemplifies that small cities can accommodate large gains in ridership, as long as the bus corridor incorporates employment centers as well as residential nodes. In the first year after the opening of EmX, the line posted 80% ridership gains over the local bus that the BRT line replaced. So, one can expect similar results to happen with regards to Route 8, which the Greenville BRT line is slated to replace.



Shelter on EmX Line (Valley Transit Authority)

Eugene Metro Population:

351,715

System Length: 4 Miles

Stop Spacing: 0.44 Miles

Amenities: Intelligent Transit Systems, Off-Board Payment (Planned), Station Decoration, Info Kiosks, Multimodal Access

Peak Headways: 10 Minutes

Right of Way: Exclusive, non-grade separated

Opening Date: 2007

Case Studies: Pittsburgh, PA: West Busway

Why Pittsburgh Matters for Greenville:

1. *Abandoned Railways are Useful*

Pittsburgh's use of abandoned railways for this busway gives credence to the planned use of an abandoned rail right of way in Greenville. Using abandoned rail right of ways provided easy grade separation for the buses, making their running time more competitive with cars because they didn't have to stop at traffic crossings. Similar results in terms of competitiveness with the car can be expected in Greenville.

2. *Wide Stop Spacing is Beneficial*

Pittsburgh demonstrates that fewer stops are a positive rather than a negative. Having fewer stops allows for faster end-to-end travel time for the bus, as it has to stop less. This, paired with the grade separation, allows for very fast travel that effectively competes with cars.



The West Busway (Port Authority of Allegheny County)

3. *Make Station Areas Attractive*

The station areas of Pittsburgh were made to be attractive. While aesthetics may be something that gets dismissed as unnecessary, they are important for a transit station's usability. Having a nice-looking station invites use and therefore keeps the station safe.

4. *Signal Priority is a Good Investment*

This helps the buses of Pittsburgh go fast when they are not on the busway. Greenville should consider such additions outside the rail grade.

5. *Placemaking is Important*

The West Busway, instead of developing places, developed park-and-rides. Greenville should learn from Pittsburgh and avoid large park-and-rides on most of the stops.

Pittsburgh Metro Population: 2,356,285

System Length: 5.1 Miles (System: 18.5)

Stop Spacing: 0.83 Miles

Amenities: Signal Priority, Info Kiosks,
Multimodal Access

Peak Headways: 1.33 Minutes

Right of Way: Exclusive, grade separated

Opening Date: 2000 (System: 1977)

Case Studies: Cleveland, OH: The Healthline

Why Cleveland Matters for Greenville:

1. *Permanent Infrastructure Matters*

The example of the Healthline demonstrates that permanent-looking infrastructure and amenities are important for the long-term viability of a transit line. The better taken-care of a station is, the more likely the station is to attract development. Better amenities signal that the station is expected to stay there a long time. So, following from Cleveland, Greenville should make sure that all of its stations are equally attractive, with all of the features in as many of the stations as possible. Simple consistency of amenities will help ensure that each station can be as successful as possible.

2. *Connects with Major Institutions*

The Healthline connects major destinations and institutions throughout Cleveland. As is planned in Greenville, the Healthline also connects some inner-city neighborhoods to University Circle, with some modest degrees of success. Near University Circle there is a cluster of hospitals and related services. Working with these institutions and addressing their concerns early on in planning has made the stations around them fairly successful. This gives justification to Greenville's plans to connect neighborhoods to the central business district and CUICAR, both of which are major employment centers for the region.



Cleveland RTA buses arriving (Cleveland RPA)

Cleveland Metro Population:

2,068,283

System Length: 7.1 Miles

Stop Spacing: 0.42 Miles

Amenities: Off-board payment,
Intelligent Transportation Systems,
Station Decoration, Info Kiosks

Peak Headways: 5 Minutes

Right of Way: Exclusive, non-grade
separated

Opening Date: 2007

Case Studies: Hillsboro, OR: Westside MAX

Why Hillsboro Matters for Greenville:

1. *Transit Can Work in the Suburbs*

Suburbs are generally more oriented towards automobiles, but there is a clear demand for public transit in these areas. While Greenville isn't a suburb like Hillsboro, its development pattern in the city limits outside of downtown looks more like a suburb and less like a city. Hillsboro suggests that, while Greenville currently looks like a sprawling area, it can be reoriented toward transit.

2. *Regional Connectivity is Important*

Transit in suburban areas connect the region by improving levels of access throughout the city. Hillsboro is a suburb of Portland, and while this is different from Greenville, Hillsboro

shows what can potentially happen to places such as Fountain Inn, after extensions have happened.

3. *Urban Environments Matter*

The Hillsboro MAX is similar to Greenville's vision in that the surrounding areas are alike. The densities and built infrastructure around the transit service are comparable both in Greenville and Hillsboro. It will be very important for Greenville to follow strict development guidelines for land uses around the transit corridor as Hillsboro did in order to see similar successes.



The Westside MAX Pulling into Hillsboro (Oregon Metro)

Portland Metro Population:

2,260,000

System Length: 18.0 Miles

Stop Spacing: 0.9 Miles

Amenities: Off-board payment, Intelligent Transportation Systems, Station Decoration, Info Kiosks, Multimodal Access

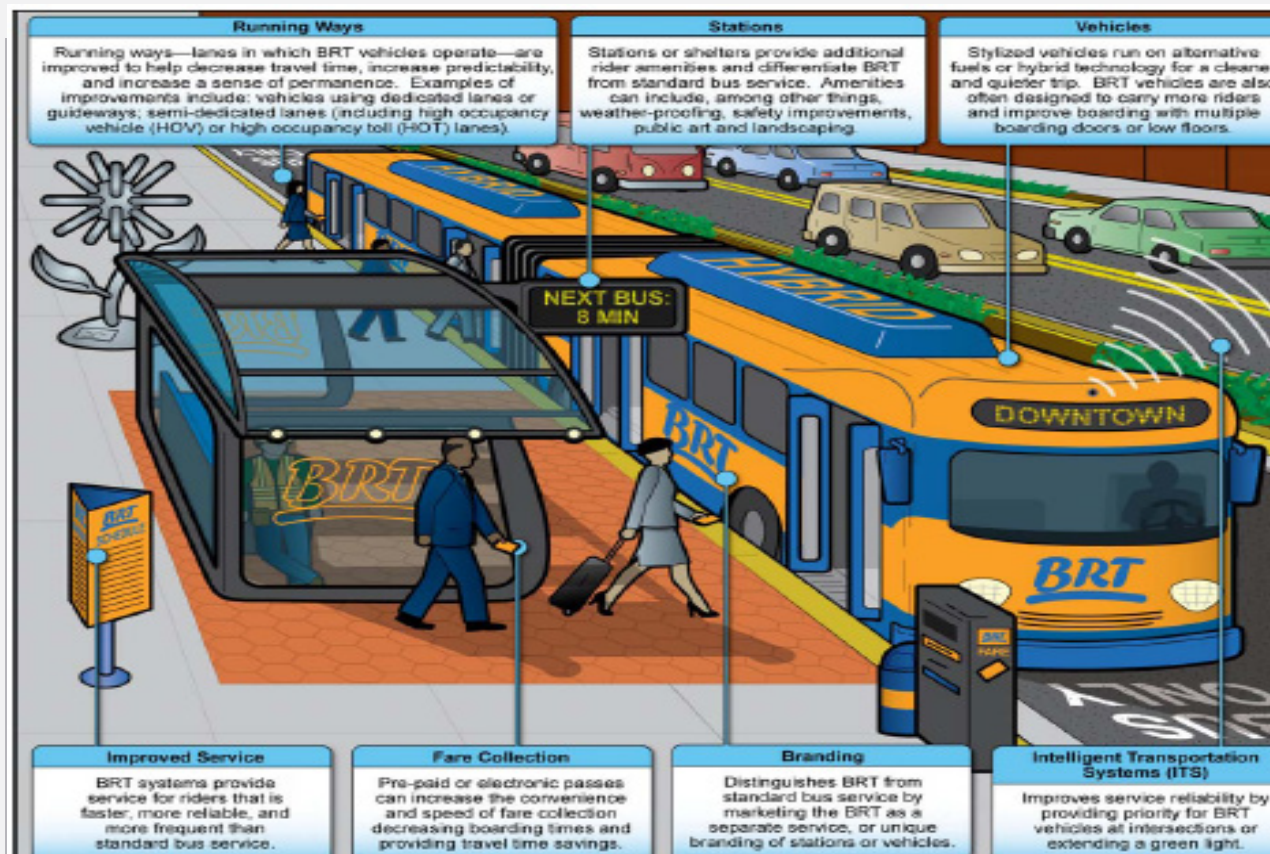
Peak Headways: 15 Minutes

Right of Way: Exclusive, grade separated

Opening Date: 1998

Bus Rapid Transit (BRT)

Bus Rapid Transit (BRT) is usually defined as a higher quality bus service that combines the speed and ride quality of rail with the cost effectiveness of a local bus. These services usually include many examples of higher quality services, including: off-board payment, intelligent transportation systems, branded vehicles, station amenities, and exclusive right of way. While amenities are important, among the most important elements of BRT is the fact of much more frequent, reliable service, so that people can rely upon the bus rather than hoping that the bus will come.



An Outline of BRT features (Government Accountability Office)

History of Bus Rapid Transit:

The very first move toward Bus Rapid Transit involved bus-only lanes in Chicago in the late 1930s. Thereafter, not many innovations happened until 1969, when the first true busway was installed in Northern Virginia along the Henry G. Shirley Memorial highway. Many more additions to BRT followed in the 1970s, both internationally and in the United States. The first busways in both Curitiba and Pittsburgh opened during the decade, along with the Runcorn busway in the UK and the first part of the Porto Alegre system. It must be noted that all, with the exception of Curitiba, tended to be more infrastructure-based and had a tendency

to concentrate on peak-hour traffic rather than all day service, Pittsburgh notwithstanding.

Curitiba's busway would go on to influence the entire world, evolving from one corridor to several branching across the city. It is with Curitiba that the idea of BRT as a surface metro began. It is with Curitiba that many of the features that above were first considered a feature of the system. So, Curitiba pioneered the concept of BRT as the field knows it today. The 1980s brought expansions to both the Curitiba and Pittsburgh systems as well as the introduction of the Ottawa busway in Canada in 1983 and the Adelaide busway in 1986. There were more systems opened in the 1990s, such as those in Miami and Leeds, but the period since 2000 has truly been the biggest explosion of the spread of the technology. The all-day, Curitiba-style model has spread all over the world, from Seoul to Las Vegas to Lindhoven to Bogota, although some proponents for a more Pittsburgh-style model do still persist.



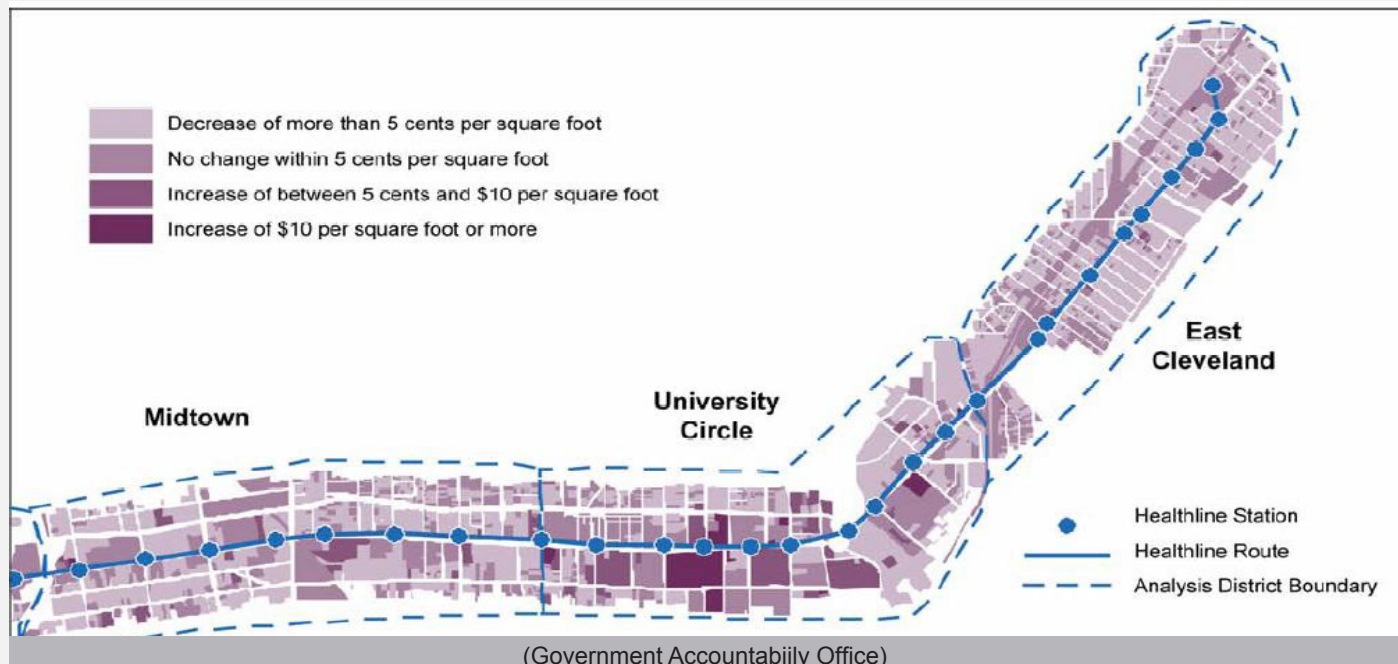
Curitiba BRT Station (www.urbanhabitat.org)

Effects on Property Values:

Some studies show a general increase in land value with higher levels of transit accessibility, although this varies city to city and through time (Cervero and Kang, 2009, GAO, 2012). The 2008 housing crisis led to a general decrease in housing price stability, which may not have been taken into account in the GAO study. Transit corridors with high levels of accessibility offer a quality of service that is demanded, and the market responds with higher land costs for better access.

Land values within these transit corridors tend to increase more around major activity centers and at transit access points or stations as compared to other areas within the transit corridor. There are some perceived negative externalities associated with close proximity to transit. Common stigmas include increases in pollution, crime and noise. They tend to decrease property values near transit services. Benefits such as increased mobility, accessibility and cost-savings normally outweigh any decrease in land value.

Land Value Changes along Cleveland's Healthline BRT Corridor, 2006 through 2011

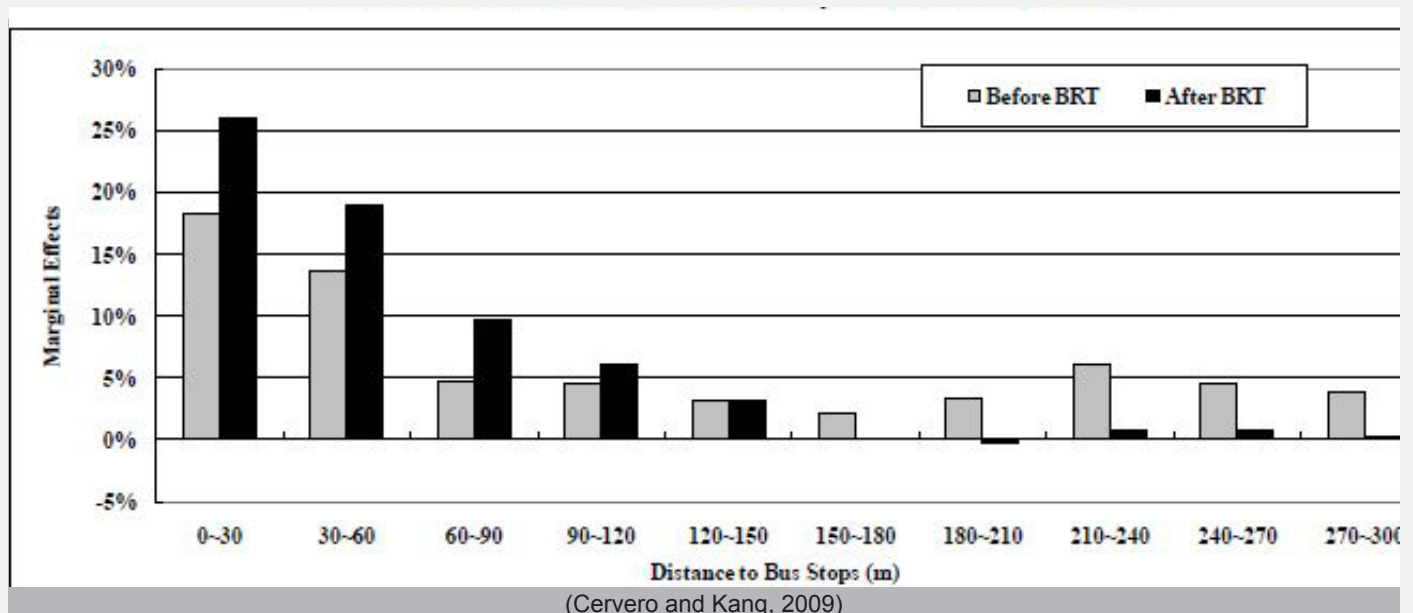


Cleveland, Ohio, USA:

There are numerous examples and studies that vary based on location, mode of travel, and time, but they all help illustrate transit's impact of land value. Cleveland's Healthline BRT has varying results for land value change through its transit corridor. The University Circle segment of its line experiences the highest increases in land value when compared to the Midtown and East Cleveland segments. Researchers point to the fact that the University City segment had more permanent infrastructure for the line, as well as major destinations such as their many hospitals

and employment centers. Higher increases can also be seen directly adjacent to transit stations, most likely due to their easier access to transit. These land value changes happen slowly over time from the time the project is announced until present day. In the case of the Healthline, areas in University Circle saw an exponential increase in land value 2 years after opening with slower increases during the four years prior.

Marginal Effects of BRT Bus Stops on Non-Residential Land Values by Distance Intervals



Chicago, Illinois, USA:

In the case of Chicago's Orange Line, a 1995 report found that during the three years prior to the construction of the line, home values within a half mile of proposed stations rose up to 19.4%. Another study in 2004 found that these same homes within a half mile of the transit stations fell 9.8% after construction. Researchers attributed this decrease to the realization of the potential negative externalities. Another opinion suggests that this decrease was the realization of the artificial strength and inflation in the market, and thus home values recessed to their fair market value. If the second opinion is true, the market experienced a net increase of home values ($19.4\% - 9.8\% = 9.6\%$ increase).

San Francisco, California, USA:

Numerous studies have analyzed how distance from transit stations impact home prices. A 1997 study found that home prices near BART stations in California increased \$2300 for every 100 feet closer to the station, while a 2001 study found an increase of \$1578 for every 100 feet closer. A 2004 study of the Metrolink in St. Louis found an increase of \$140 in home prices for every 10 feet closer to the station.

Hamilton, Ontario, Canada:

A light rail line feasibility study for Hamilton, Ontario projects land values to increase at 5-15% at major nodes and transit access points. There are a multitude of factors that influence the value of land. The fundamental rule in real estate is location, location, location. The theory that land values increase at locations with high accessibility (i.e. transit stations) seems plausible. Proximity and accessibility obviously play a major role in the valuation of land, but there are other influences that should be considered such as public safety, access to jobs, quality housing, tax rates, financing and zoning to name a few.

Seoul, South Korea:

A study of Seoul's BRT Line and its impact on non-residential land values within the transit corridor is quite telling. Their results show that the closer a property is to bus stops, the higher increase in property value than before without a bus stop. But land more than 150 meters away from transit stations see a decrease in land value with the implementation of transit service. This could be because places with more accessibility are more desirable and competitive.

Focus Group: Meeting II

October 15, 2012:

During the second meeting, the transportation group presented on their selected case studies and on the impacts of BRT systems on property values near stations. This included statistics and distilled lesson for Greenville from: Eugene, Oregon; Pittsburgh, Pennsylvania; Cleveland, Ohio; and Hillsboro, Oregon. The group also included an overview of the latest in studies on the land use impacts of Bus Rapid Transit, both international and from the evaluations of several American BRT lines. Once again, the transportation group presented with the TOED/Policy group. At the end of the session, the teams and the stakeholders participated in a mapping exercise to determine places in need of better linkages in the neighborhood. The meeting suffered from poor attendance. However, mapping participation seemed to be enthusiastic.

After this point, stakeholders seemed to have little interest in asking any more of the transportation group. So, in order to get practical experience with the existing Greenville system, the team decided to do one simple task: ride the bus and document their trip. This allowed for eyewitness observation of the conditions of Greenlink's facilities. The team chose a route that specifically ran in the Westside study area so that the observations could be easily translatable to the neighborhood. The following are the results of that activity.

Notes on a Bus Ride

To gain experience with the Greenville Bus System, the transportation team rode the bus on one weekend in November. Here are some of the observations they made.

I. Facilities:

Greenlink appears to have adequate facilities at its transfer center. While the transfer station's clock was not working, it appeared to be filled with people during the Saturday that the team rode the bus. While there were bars over the windows, which convey some degree of hostility to the pedestrian, the facility did appear to be well-used. Also to note was that the Greenlink Transfer Center also doubled as a Greyhound Bus Terminal, so while Amtrak service may be harder to connect with, Greyhound services are easier, as they come during the day. The station had many connections to bikes, being bordered by bike lanes on three sides. There were many bike racks at the transfer station, including some with plastic covers that were for rent. One thing to note is that the bus lacked paper versions of its own schedule.

II. Vehicle/ Route:

Greenlink's buses had a variety of sizes, all on display on the hourly pulse. The one that

the transportation team rode on was a bus for route 9I, which goes through the Westside. The team chose this bus because it goes through what appeared to be the greatest geographic portion of the study area. The bus was rather small, not quite a regular 40-foot bus, maybe a 35- or 30-footer. Interestingly, there was an antibacterial gel dispenser on the bus. Fare was \$1.50, and more was needed for a transfer. The route itself wound through various parts of northwest Greenville, crossing a northern end of the Swamp Rabbit Trail before looping into the Northwest Branch Campus of Greenville Tech, and finally, into the Westside, looping into the inner streets of the neighborhood. There were a variety of urban settings encountered on the route, including downtown, the Westside, decaying inner suburbia, old industrial districts, almost rural parcels of land near Whitehorse road, single-family homes near the rural parcels, and apartment buildings scattered across the route.

III. Ridership:

Ridership on the bus was rather small: at no point were there more than 11 people on the bus. It appeared that most people got on the

bus toward the end of the route, within the city rather than in the more suburban areas outside of the city limits. There were more people on the bus when the team came back to the station than had left when they got on. Many of the additional riders got on in the study area.

IV. Stop Quality:

One thing that struck the team members is the quality of stops along the way of the route. Of course, there was the transfer center, the only place to transfer to another bus. Stops along the route also varied in terms of quality. Some stops had full shelters, with a bench, a covered area, garbage and recycling, and solar power. While there are some stops with benches, the team did not encounter any on this particular route. Most of the rest of the stops were signs attached to poles on a sidewalk. One fact to be noted is that some stops in the inner city weren't even on sidewalks. Sometimes, the sidewalk was blocked by construction projects fixing the sidewalk. At one point, the team encountered a community-made bus stop that consisted of a chair, tied to a pole, that had the words "Bus Stop" carved into the back of the chair. This suggests that if the route is to be kept, perhaps there deserves to be more investment in the area.



Bus Stop on Pendleton St. in Greenville (Raven Campbell)



Bus Stop in the West Greenville (Raven Campbell)

Conclusions

Transportation is an important aspect of Greenville's connections project. The goal for the project is to improve the mobility and accessibility for Greenville's residents by implementing a BRT network. BRT can both provide better service to the transit-dependent and attract new riders away from their cars. The BRT line is an important component of Greenville's development strategy because it can help stimulate growth. The investment in the service shows that Greenville is committed to a more sustainable vision for transportation and to better connecting the city.

The transportation team's research has helped to give examples of successful BRT stories and what features helped to make this possible. There are infrastructure and design features that are essential for the service to properly work in Greenville. Land use has a major influence on the function of the BRT, by providing destinations and opportunities throughout the corridor for residents to travel to. The service itself must be well planned based on the demand from riders, as well as the financial feasibility for Greenlink.

Greenville is heading in the right direction by focusing on the connection aspect of the BRT line. The proposed design of the service mirrors that of other successful lines, such as in Cleveland. Wide spacing between proposed stops, exclusive grade-separated right of way, and connections to major institutions like CUICAR offer promise for the success of the service.

It is important that Greenville focuses on involving the community residents and other stakeholders throughout the process. Public participation and input for the planning process can help the line gain support and ultimately riders. Special attention to the amenities and infrastructure near transit stops is important so that riders are comfortable and are able to navigate the area with ease.

There is still a lot of work that needs to be done to implement all the necessary changes. Greenville is clearly committed to providing a better quality of life by improving transportation options. Greenville must continue to emphasize the importance of public transit and how it can better connect the city in the future.

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TRANSIT-ORIENTED DEVELOPMENT

Felicia Boulware
Jennifer Folz

Transit-Oriented Development

Mission:

In Fall 2012, the City of Greenville collaborated with a team of students from Clemson University's City and Regional Planning program to research and present successful and innovative techniques used in transit-oriented developments. This team researched specific strategies associated with transit-oriented development and transit-oriented economic development techniques. Their findings were presented to a focus group of approximately 15 concerned Greenville citizens in early October.



Transit-Oriented Development

Transit-oriented development (TOD) has no concrete definition, but is generally characterized by pedestrian-oriented, medium- to high-density development located near a transportation stop. The land uses are predominantly mixed, merging retail, commercial, and residential developments in central locations. TOD nodes focus on the importance of diversity and inclusivity. It is important to include diverse uses within each development, often mixing several on one parcel, as well as by providing home sizes and styles that appeal to various groups of people. The primary purpose of transit-oriented developments is to create a livable and site specific place. Since TODs have no concrete definition, development strategies can be tailored to fit within the context of the surrounding neighborhoods and within the cultural heritage of the region. This helps to eliminate cookie cutter developments and instead can attract residents and visitors from the entire region.

Multi-Modal Transit:

Transit-oriented developments are meant to encourage an increase in transit ridership and create a decrease in automobile dependency through the use of multiple modes. These modes include walking, biking, public transit, and automobiles. Multi-modal transit emphasizes travel alternatives to personal automobile use. Transit-oriented development relies heavily on the availability of diverse modes of transportation. Development that accommodates a variety of travel modes creates an accessible environment for diverse groups of people. Multi-modal transit is a great option for areas wanting to reduce their automobile dependency and increase accessibility and connectivity to areas throughout the city. A reduction in auto dependency creates a more pleasant walking and biking environment and can lead to improved quality of life and better health. The increased accessibility and connectivity within the city can provide countless opportunities for residents and visitors alike.

TOD: Questions for Success

Does the area support sufficient density at both trip start and trip end?

Successful TODs rely on significant job and housing density; this density will vary based on location since TODs are not one-size-fits-all. In order to spur transportation ridership and provide an incentive for people to ride transit, there needs to be an abundance of jobs and housing in close proximity to transit stops at both trip ends. Transit-oriented developments are ideal places to locate these housing and jobs. Researchers have found that there is a positive correlation with proximity to transit stops and property values, as previously discussed in the transportation chapter. Therefore, this is another incentive for developers to focus their efforts on creating transit-oriented developments.

WHO?
WHAT?
HOW?



Are transit lines well connected and is service frequent?

In order for transit-oriented developments to be successful there needs to be a reliable and substantial transit service to attract residents and visitors to the area. Studies have shown that when headways are low, meaning transit service is frequent, stops produce greater boardings and alightings. When transit systems serve a greater portion of a region efficiently, community members are more likely to utilize the service. Transit travel times also need to rival those of driving times. A transit system may have frequent and far reaching service, but if transit travel times are double vehicular travel times, few people will use the service on a regular basis.

Is the market able to support density in commercial, retail, and residential sectors?

The market needs to be able to sustain residential, retail, and commercial growth within the next 10 to 15 years. It is essential for communities and developers to work together during the TOD process. This process emphasizes the importance of public-private partnerships. Public-private partnerships help determine what the current and future market trends will be in regards to goods, services, and housing needs. There are several questions to ask for a market analysis. For example:

- Who is living in and visiting a particular area?
- What are their likes/dislikes?
- What income bracket are they in?
- How much of their income is directed toward housing and transportation expenses?
- How much of their income is disposable?

The answers to these questions are known as demographics and psychographic segmentation. This information helps cities and developers design developments that will be utilized by the existing community.

LIVABLE and site specific PLACES

Are there willing participants?

All developments need to have people willing and interested in the transit-oriented development process. There are many actors and stakeholders involved in creating this type of development, and in order to succeed these groups need to be willing to actively participate. Several important participants in the TOD process are developers, lenders that are able to fund transit-oriented developments, city leaders, city staff, local and regional business owners, regional planning agencies, and community champions. Not only do these players need to be willing to participate, they need to be able to clearly articulate and effectively negotiate what they need and want from the development.

TOD: Policies and Design Guidelines

Transit-oriented developments are made feasible through unique policies that are created and enacted at the local level such as:

- Maximum Parking Requirements (no minimum requirements)
- Regulated Uses and Non-uses
- Streamlined Permitting Process
- Developer Bonuses:
 - Density and Height
 - Floor Area Ratio
 - Vertical Mixed-Use
- Design Guidelines

Maximum Parking Requirements:

Functional transportation nodes are the essence of every TOD. Often, mixed-use, higher density developments near multi-modal transportation hubs do not properly serve transit modes as intended. This can result from an over abundance of parking. When developments are lost in a sea of parking, the complex instead may be negatively recognized as transit-adjacent development (TAD). To avoid TAD implementation, policies need to set maximum parking standards per square foot rather than minimum ones. Parking spaces required may also be lessened if the developer provides items like carpool spaces, electric charging spaces, or bicycle parking facilities.




TOD Low-Income Housing in Arlington, VA (huduser.org)

Regulated Uses and Non-Uses:

One of the primary functions of a zoning ordinance is to dictate the uses allowed on particular parcels of land. It is imperative that when policies are created for transit-oriented developments, that cities zone to get what they want, not prevent what they do not want. Transit-oriented developments are generally most successful when many types of uses are able to blend harmoniously. TODs often will allow for more intense uses, such as retail and commercial spaces to occupy the most heavily traveled areas of the development with office and residential areas located above or a greater distance from all the action.

Streamlined Permitting Process:

TODs require careful and detailed planning from both the developer and municipal staff. There are many actors and stakeholders involved and some of the most important are those who issue the permits required to make TOD development feasible. The permitting process needs to be well documented in the zoning ordinance and easy to follow. Staff needs to be trained in TOD implementation procedures and must effectively negotiate with stakeholders to create a development that will serve the community while retaining its profitability.

Site Design Possibilities at Different Floor/Area Ratios			
	FAR 0.4	FAR 0.6	FAR 1.3
			
BUILDING			
Land Area (square feet)	30,000	15,000	40,000
Stories	1	3	3
Building Area (square feet)	30,000	45,000	120,000
PARKING			
Land Area (square feet)	37,000	53,000	28,000
Spaces	107	152	420

Developer Bonuses:

Developing transit-oriented developments is an art form. To attract the best and brightest developers to an area incentives need to be created at the policy level. There are several tools policy makers have at their disposal to create these incentives. One of the most useful tools are developer bonuses. These bonuses may come in the form of density and height bonuses, floor area ratio bonuses, or vertical mixed-use bonuses.

The bonus system can be applied in many creative ways but it is best to keep it streamlined and easy to follow. One method bonuses can be allocated is through a point system. For instance, the city provides a list of options that will benefit both the city and the users of the space, such as high percentages of open space, allotments for low income housing, previous parking lots, or by providing a greater amount of foliage than usually required. If a developer implements three of the options listed, the density allowed on the site would increase.

Adequate
Window Ratio



NO Blank Walls



Visible Entrances



Unique Places

Commercial and
Retail on the First
Floor



Adequate Height
for the
Neighborhood



Create Funtional
Transportation
Nodes



Interactions
between
Buildings and the
Street

Design Guidelines:

No two transit-oriented developments are the same so unique policies can be created to prescribe design guidelines so TODs will emulate local neighborhood characteristics. These guidelines are developed through community design charettes and meetings with residents during public meetings. In fall 2012, the City of Greenville hired a consulting firm to gather neighborhood characteristics from neighborhood residents. They are to collect information about what type of development residents would like to see in the future. During this process the consulting group and the City will develop a set of guidelines for the proposed transit-oriented developments.

These design guidelines should place emphasis on the pedestrian realm. Some elements to include are specific trees and plant guidelines, human-scaled street lighting, art, and other amenities that create a unique place. Blocks should be well connected and utilities should be located underground. In addition, sign standards need to be established and enforced to provide a welcoming and cohesive streetscape. Design guidelines also must be established for the buildings themselves as architectural details are one of the most important elements of a successful TOD. Please see images on the previous page for some design examples.

TOD: Case Studies

Case studies are excellent tools for gathering information on how TODs have been done in the past and what contributes to their success. Greenville has been experiencing steady growth over the past ten years and this growth is expected to continue. The city also has certain demographic, social, and geographic properties that create a unique TOD process. It is important to study other cities in the country that exhibit some of the same characteristics as Greenville.

Hillsboro, OR and Charlotte, NC are the two cities this project examined. These two cases and their TOD strategies will be discussed on the next two pages.

Case Studies: Charlotte, NC

Background: Charlotte, North Carolina was chosen as a case study because it has similar demographics to Greenville. Charlotte uses the following tools to implement TODs. They supplement the zoning ordinance so the city can create walkable and multi-modal nodes.



Charlotte Mixed-Use TOD (fhwa.dot.gov)

TOD Overlay Districts:

Distinguishes different types of development allowed in each district. The districts are residential, employment, and mixed-use. Residential districts accommodate a variety of housing types while employment districts contain major employment nodes. The mixed-use district is the catch all district and contains a variety of uses, the primary being commercial.

Transition Zones:

Accommodates existing parking, setbacks, and densities while the area transitions to a different zone as determined by designated future land use. Prohibited uses and minimum residential densities drive the transition zone.



CATS Light Rail TOD Station (iu.unc.edu)

Pedestrian Overlay Zones:

Promotes a pedestrian oriented environment. This is accomplished by promoting mixed-use development, use of public transit, and by connecting neighborhoods to amenities. It also encourages interactions between buildings and the street

Design Guidelines:

Utilizes maximum parking standards, encourages building reuse and infill, has a variety of shared parking options, and requires open space. The use of these design guidelines allows the City to create site specific stations that include new development while improving the appearance and utility of existing developments.

Case Studies: Hillsboro, OR

Background: Hillsboro, Oregon was chosen because it is similar in size as Greenville and is experiencing a revitalization movement driven by a desire to invest in the area. The type of TOD policies Hillsboro uses is station community planning areas (SCPA). These areas are pedestrian oriented, multimodal, and promote a live/work/play lifestyle. There are nine station community planning area categories. The categories are based on allowed development density, proximity to a transit station, and permitted uses.

Residential High Density

Commercial Downtown

Residential Medium Density

Commercial Highway

Residential Low Density

Commercial Station

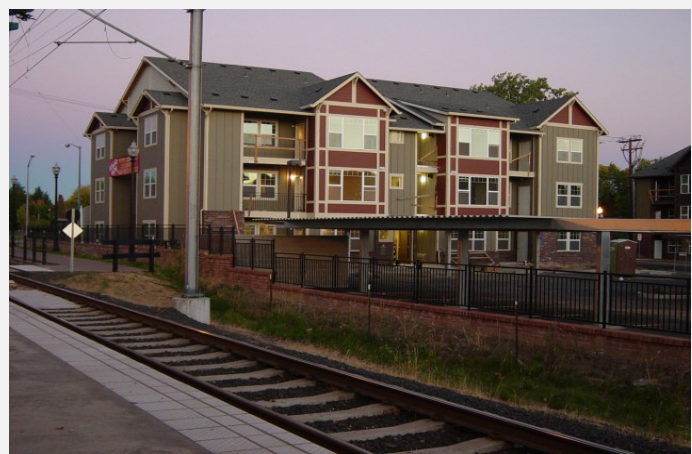
Residential Village

Commercial Multi-Modal

Residential Town Site



Orenco Station (cyburbia.org)



Orenco Station (cyburbia.org)

Case Study Conclusion:

Case studies provide an opportunity to determine what policies will work best within the context of Greenville. Policy makers can see first hand how other similar cities have successfully implemented TODs. It is important to remember that since no two TODs are the same, Greenville should only take away the concepts and basic ideas of the case studies and adapt them to the city's unique circumstances.

These documented case studies prove that TOD processes and policies vary from city to city despite similarities. They also help emphasize that the TOD process is not a "one size fits all" approach and that the City will have to work alongside many actors and stakeholders to create policies that will best serve the city and its residents.

In terms of Greenville, it will be necessary to involve stakeholders and community members from the neighborhoods surrounding the transit-oriented development since the demographics are significantly varied across the city.

Greenville's Transit-Oriented *Economic Development Stations:*

The City of Greenville is proposing two Bus Rapid Transit (BRT) stops in the Westside; one at Hudson and West Washington and the other at Mulberry and West Washington. These stops were proposed based on their location and market potential. Station 1: Hudson Street and West Washington Street stop is a quarter mile from downtown, and Station Two: Mulberry Street and West Washington Street stop is less than a quarter mile from the Amtrak station.

These stations will be where Greenville focuses its efforts on transit-oriented developments. The city is determined to spur growth in the westside neighborhoods and has formulated its own type and definition of transit-oriented development: Transit-Oriented *Economic Development* (TOED). TOEDs will help the westside become a more diverse, dense, and economically viable location for future growth.

Focus Group : Meeting I

On September 27 and October 2 several case studies of TOD were presented to two of the City of Greenville's Connections for Sustainability focus groups, Transportation and Economic Development. These presentations focused on transit-oriented *economic* development as an economic development tool for the city.

September 27, 2012: The transportation focus group discussed guiding principles for the proposed Bus Rapid Transit (BRT) route. They decided that the ideal purpose of the BRT route in Greenville is to connect people in the westside to jobs in other areas of the city. It was indicated that the westside does not currently attract the target business audience that the proposed route hopes to connect to. To address this concern the BRT was described as more than a linear mode of travel that would connect to the rest of the city via the traditional Greenlink bus network.

October 2, 2012: The economic development focus group questioned whether Greenville's market can currently support the higher density required for TOEDs. However, participants were very optimistic about the type of

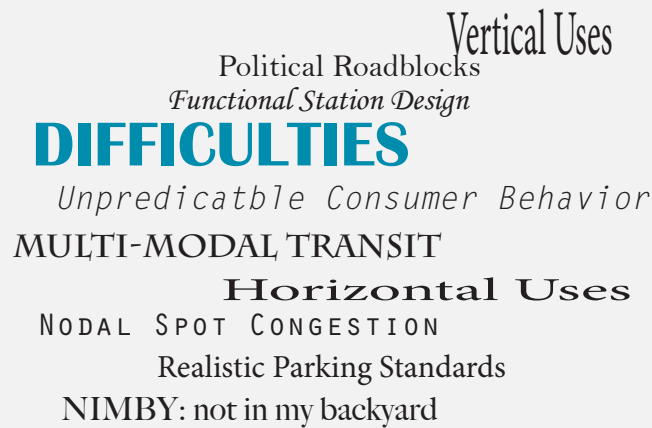


Terrace at Riverplace (www.greenvilleinformation.com)

revitalization TOEDs can bring to Greenville's westside. Some folks proposed the creation of incentives to bring companies to the westside rather than locating on the city's fringe. This type of development would be very beneficial to the lower income residents who currently have no jobs because transportation options throughout the city are lacking. Current residents are unable to afford lengthy commutes to manufacturing jobs on the edge of the city.

Finally, City staff stated that in the coming months the City of Greenville will formally define transit-oriented economic development.

TOED: Barriers to Development



There are many difficulties when it comes to developing TOEDs. These types of developments cannot be done alone, instead there are many stakeholders and actors involved in the process. It is often difficult to find common goals among diverse groups of people. There are also fiscal difficulties involved. These include perceived higher costs associated with infill development, higher land costs within the city, and current economic trends. It is important to remember that even though TOEDs rely on transit modes, they do not create the market.

It is important to acknowledge and address these barriers in order to have a successful TOED.

In 2004 the Transit Cooperative Research Program Report published information from a National Survey of Public-Sector Stakeholders to Barriers and found the following to be the largest barriers to creating TODs.

- Automobile oriented TOD patterns
- Lack of lender/developer interest
- Limited local expertise
- Questionable market demand
- Inadequate transit services
- Poor siting of stations



TOED: Implementation Strategies

The first step in developing a TOED is to develop a clear vision of what TOED means in relation to the region, corridors, and in the community.

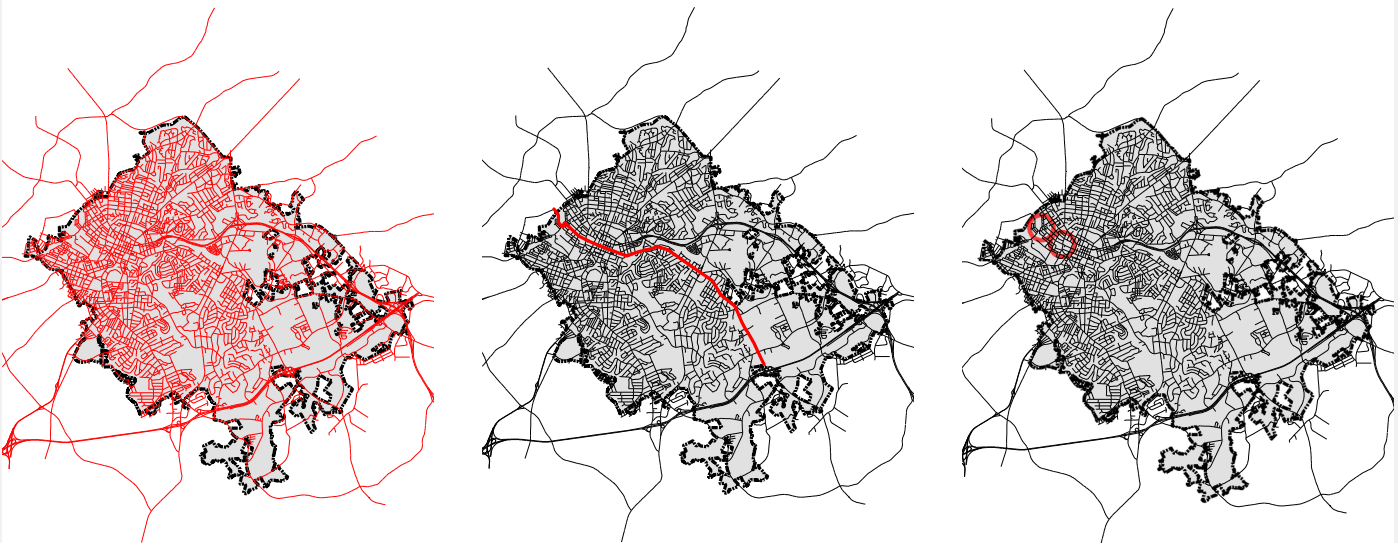
Region: Where do stations fit?

Corridor: What are the station's relationships to each other?

Community: How will TOEDs add value and create distinct places?

Some of the most important steps to undertake when developing transit-oriented economic developments include creating a walkable district (5 minute walk from stations), concentrating office and retail near station, setting a vision and framework for change overtime, rethinking zoning (zone to get what you want, not prevent what you don't), setting incentives and community benefits, and ensuring community plans are in accordance with state and regional plans.

It is difficult to create functional nodes and desirable places.



TOED: Greenville's Toolbox

There are many tools that can be used to help create a successful TOED, and these tools need to be tailored to every station and community. The following is a list that can be applied to Greenville. This list can be altered according to the needs and wants of each community and stakeholder's opinions. Greenville currently utilizes some of these tools which are described below.

Greenville's Transit-Oriented Economic Development Toolbox

*Encourage Public/Private Partnerships	Create unique public places
Utilize Zoning Tools	Define neighborhood character
Mixed use: vertical & horizontal	Pedestrian-friendly design
Increase residential densities near stops	*Educate the public about TOEDs
Mixture of housing types	Quarter mile radius
Compatible with surrounding neighborhood	Small scale convenience shopping near station
Provide public parks	

Encourage Public/Private Partnerships:

The City of Greenville has an extremely positive track record of participating in profitable public- private partnerships. Through this particular tool, downtown Greenville has seen an incredible revitalization in recent years, and it would be beneficial to continue these successful relationships in regards to transit-oriented economic developments, not only in the westside, but throughout all of Greenville.

Educate the Public about TOEDs:

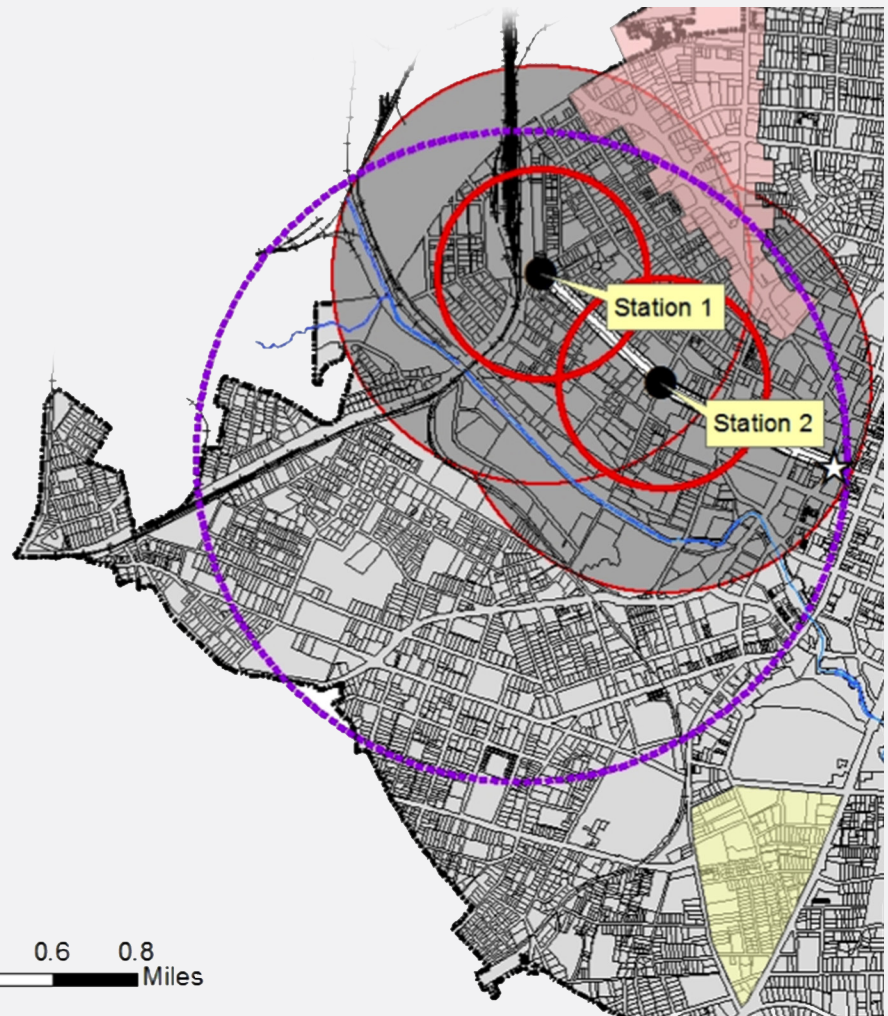
As mentioned previously, champions can make or break the implimentation of TOEDs, especially if they are being implimented for the first time in a particular city. One way to seek out these champions is by educating the public, something Greenville does very well. In regards to TOEDs, this process has already begun through the Connections for Sustainability program and through lunchtime educational meetings with consultants and guest speakers.

Greenville's Westside Neighborhood

TOEDs require the expertise of community members and neighbors of where they are going to be located. The two proposed TOED developments in Greenville's westside are displayed below. The following maps depict current conditions in the westside in regards to connectivity and land use.

Legend

- BRT Station
- △ Transfer Station
- 1/4 Mile Buffer
- Pete Hollis
- Haynie-Sirrine
- Washington St
- Westside Study Area
- Reedy River
- Rails
- Greenville City Limits













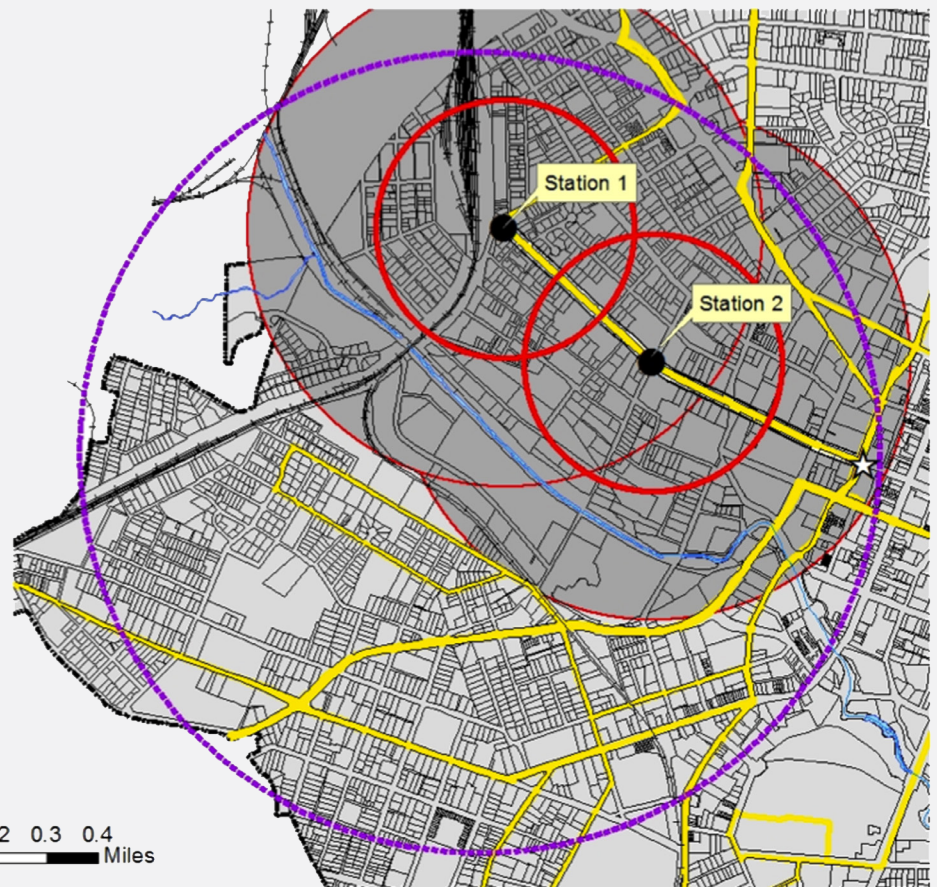
TOED: Current Westside Conditions

Bus Routes:

Currently there are several bus routes serving the West Washington corridor and the surrounding area. This map shows all of the routes that service the area in one tone in order to visually describe how well the area is served by public transportation. Greenville's proposed Bus Rapid Transit (BRT) route will connect the westside of the city to education, office, retail, and commercial destinations. As this map depicts, there are currently few direct bus routes connecting the existing system to the proposed BRT. In order to serve westside residents and the BRT better these routes may need to be rerouted sometime in the near future.

Legend











-  Greenlink Bus Routes
-  BRT Station
-  Transfer Station
-  1/4 Mile Buffer
-  1/2 Mile Buffer
-  Washington St
-  Westside Study Area
-  Reedy River
-  Rails
-  Greenville City Limits

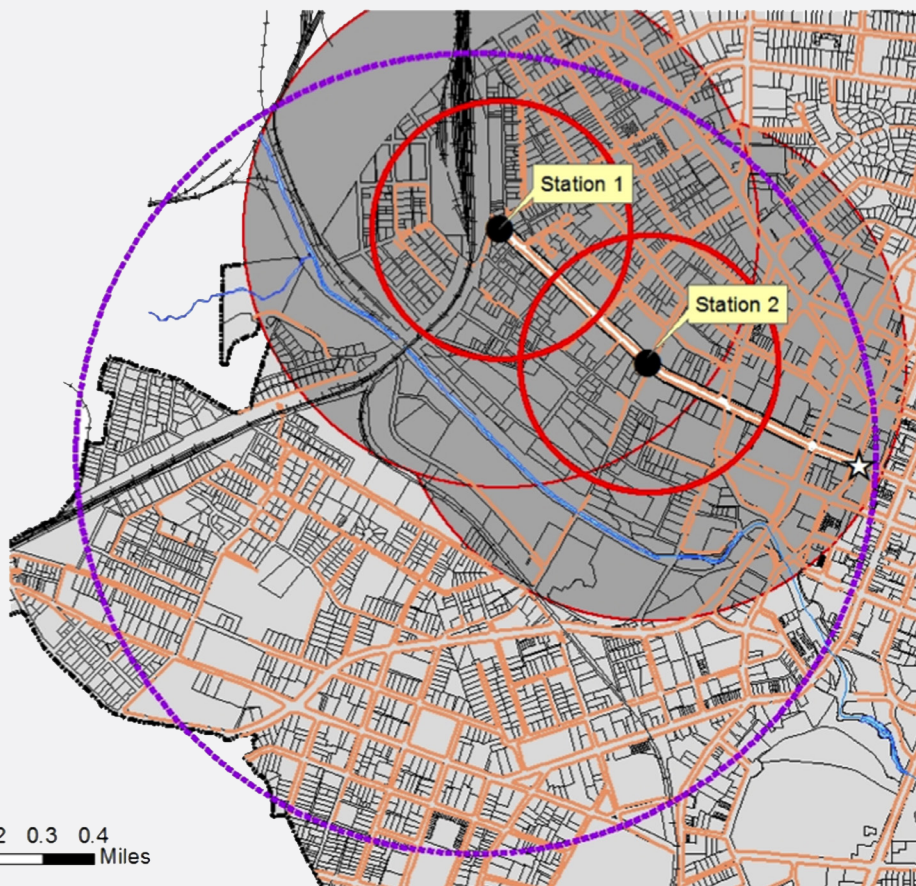


Sidewalks:

The following map depicts the location of existing sidewalks on the westside. Both stations are well connected by sidewalks to the north, but there is a lack of sidewalk connectivity to the south. This lack of connectivity is partially due to the presence of the Reedy River and the flood plain. This land is currently being reviewed by local stakeholders to determine the best possible uses for the site. To better link the westside to the transit-oriented economic development stations, sidewalk connectivity will need to remain a priority in any future developments.

Legend

-  Sidewalks
-  BRT Station
-  Transfer Station
-  1/4 Mile Buffer
-  1/2 Mile Buffer
-  Washington St
-  Westside Study Area
-  Reedy River
-  Rails
-  Greenville City Limits

























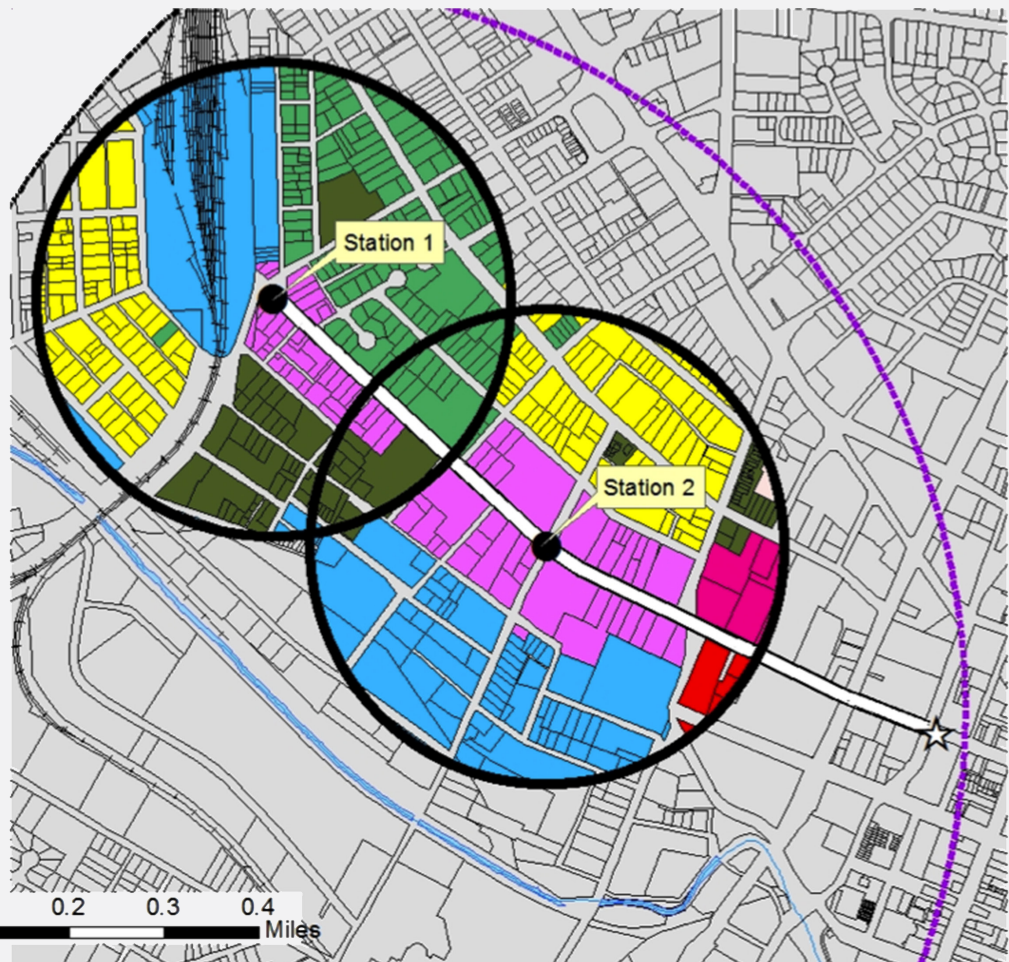
TOED: Current Westside Conditions

Current Land Use:

As of 2012, the land around the westside's proposed Bus Rapid Transit (BRT) stations is zoned as redevelopment in hopes to encourage developers to partake in public-private partnerships. Station One is surrounded by residential zones to the northeast, south, and west, and service district to the northwest (around the Amtrak Station). Station Two is surrounded by residential to the north and west, a service district to the south, and a regional commercial and central business district to the east.

Legend







-  Transfer Station
-  Reedy River
-  BRT Station
-  1/4 Mile Buffer
-  Rails
-  Washington St
-  C-1, Neighborhood Commercial
-  C-2, Local Commercial
-  C-3, Regional Commercial
-  C-4, Central Business
-  I-1, Industrial
-  OD, Office and Institutional
-  PD, Planned Development
-  R-6, Single Family Residential
-  R-9, Single Family Residential
-  RDV, Redevelopment
-  RM-1, Single- and Multi-Family Residential
-  RM-1.5, Single- and Multi-Family Residential
-  RM-2, Single- and Multi-Family Residential
-  RM-3, Single- and Multi-Family Residential
-  S-1, Service District
-  Greenville City Limits




Future Land Use:

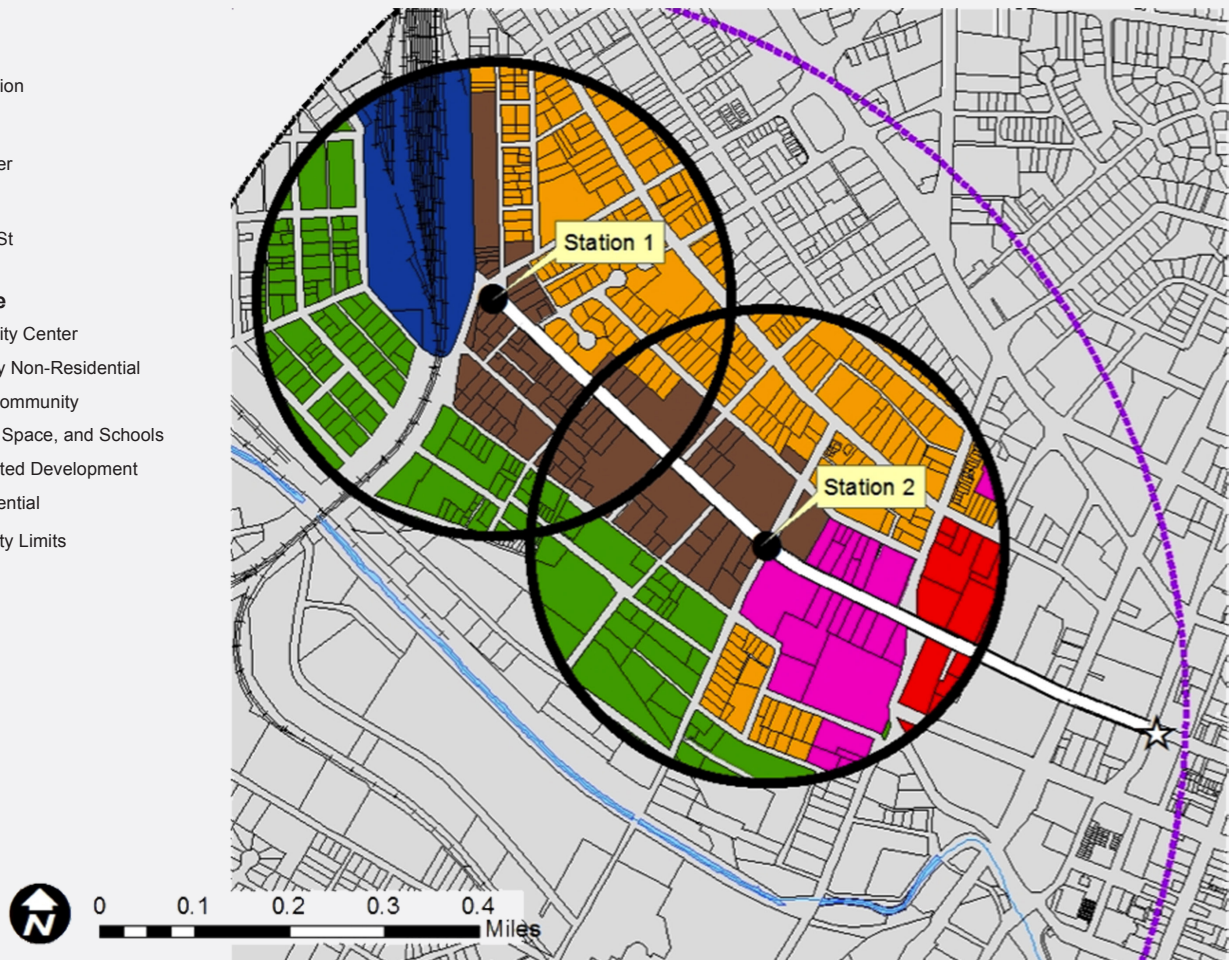
Zoning, as discussed earlier in this chapter, is the primary tool used to spur transit-oriented developments. Greenville has been developing policies that are the foundation for a transition to a more transit oriented style of development, and the governing bodies of Greenville have classified the areas directly around each station as transit-oriented development, forming a buffer between urban residential, mixed-use community, and open space.

Legend

-  Transfer Station
-  Reedy River
-  1/4 Mile Buffer
-  BRT Station
-  Washington St
-  Rails

Future Land Use

-  Mixed Use City Center
-  High Intensity Non-Residential
-  Mixed Use Community
-  Parks, Open Space, and Schools
-  Transit Oriented Development
-  Urban Residential
-  Greenville City Limits



TOED: Market Feasibility

Market feasibility is an important factor to consider when planning for TOEDs. Without the market it will not matter if you have all the other necessary components for TOEDs. The market is also important to determine the longevity of the development. If a development is not scaled to fit the market it will not be successful. Greenville has a strong economic market and is able to attract large manufacturing companies such as BMW, Hubbell, and Michelin. The city has also recently appealed to financial firms and is now home to TD Bank's corporate headquarters and the future home of CertusBank. However, when the city is divided into sections the scale and appeal of the market changes.

The market in Greenville's westside does not adequately represent the city as a whole. Currently Greenville's westside market is unable to support some of the aforementioned large scale developments. The westside of Greenville consists of 1,300 households with an average income of \$23,000. The spending potential of this section of the city is 43% lower than the national average.

This speaks volumes for the demographic population the previously discussed TOED stations will be serving. Currently the market on the westside of Greenville can only support small scale shopping centers, office and retail jobs, and the addition of moderate income housing. However, markets tend to be fickle and the westside may be more suitable for more large scale development in the next ten to fifteen years.

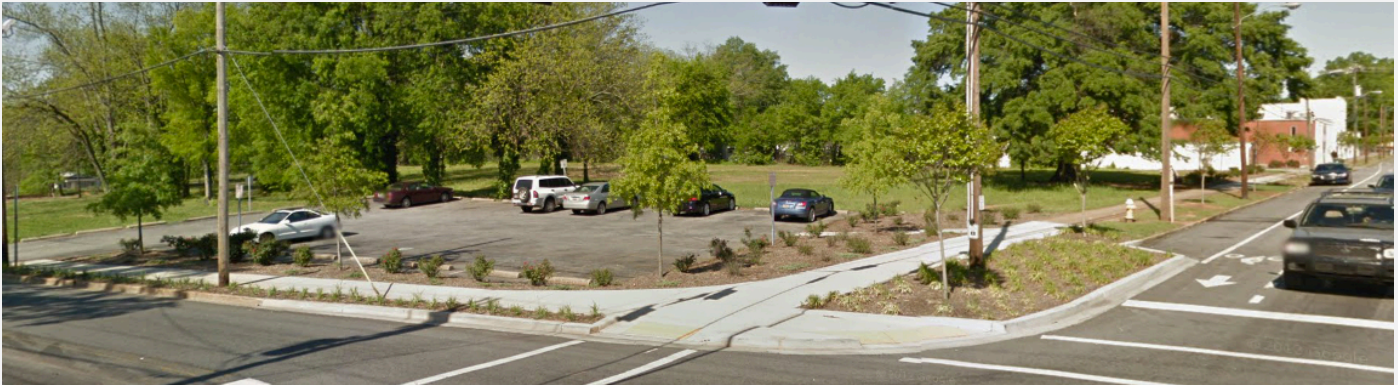
It is difficult to predict market behavior so it would be impossible to say that in ten years the area will be able to support substantial development.

So when planning for TOEDs, remember....

The Market governs where private capital is invested and it varies across the region.

Station One: Hudson Street and W. Washington Street

The following demographics and job statuses were calculated within a quarter mile around each station.* Station one has a total of 667 residents living in 390 housing units. The median age of residents around station one is 41.3 years of age, while the average household income is \$29,355. As of 2011, 25 businesses were located around the station with a total of 646 employees.



Station Two: Mulberry Street and W. Washington Street

Station two is populated by 443 residents living within 152 households. The median age of those living within a quarter mile of the station is 43.2 years of age, and the average household income is \$26,223. At the time this data was collected there were 26 businesses employing 403 people.



*Facts and figures based on 2011 Esri Community Analyst data, Images from Google Streetview

Conclusions

Implications for Future Transit-Oriented Economic Development in Greenville

The City of Greenville is actively pursuing public input regarding land uses around the proposed bus rapid transit (BRT) system, linking residents from the existing Amtrak station to Clemson University's International Center for Automotive Research (CU-ICAR). They have hired a private consulting firm to form policies and design guidelines for future transit-oriented economic developments, and have fomulated a small focus group full of stakeholders to work alongside the consultants.

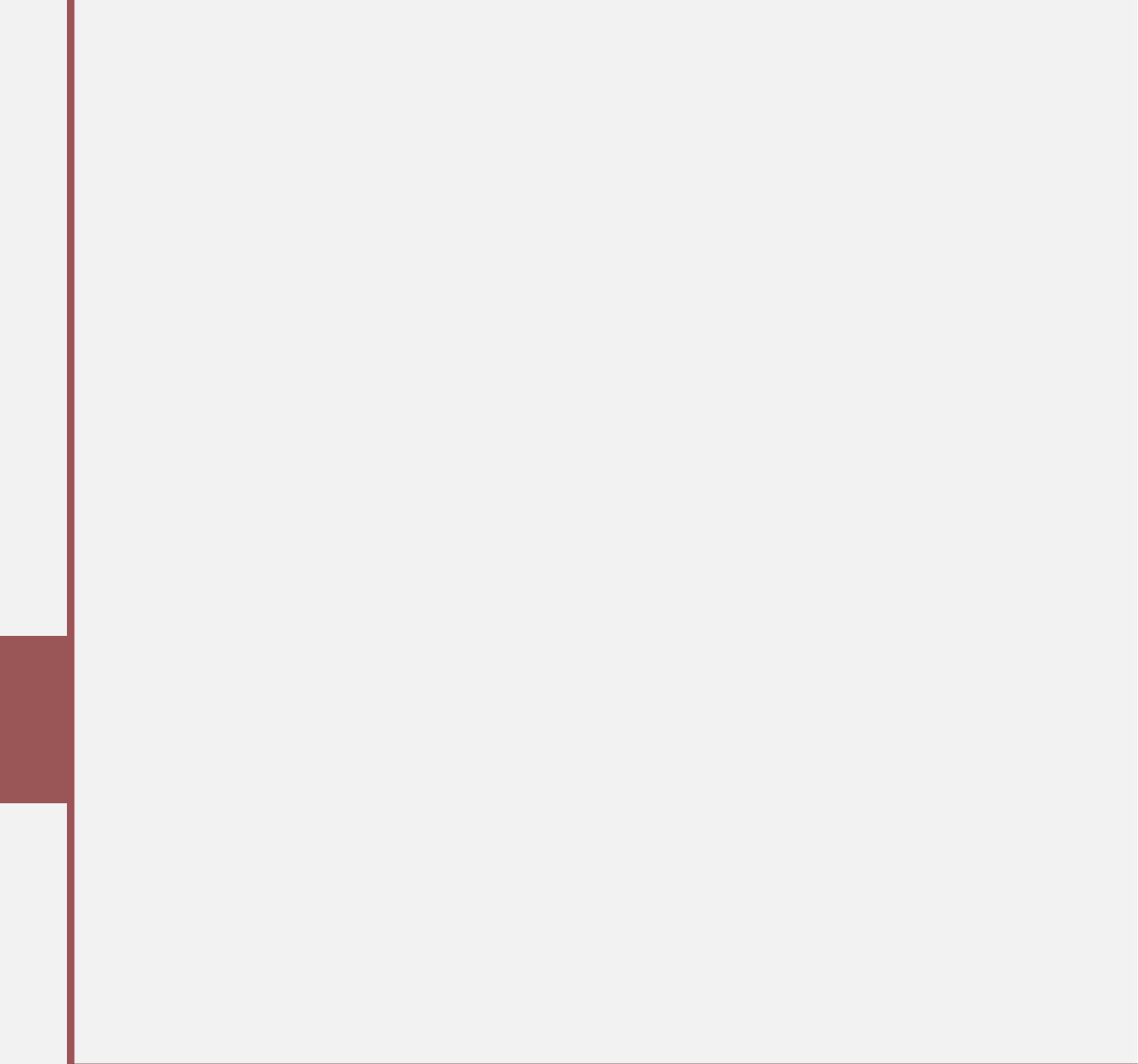
Further markets studies will need to be completed to determine the type of development that will best suit the needs and wants of residents and business owners of the westside.

As the city continues to pursue TOEDs input from the public it will be necessary to keep in mind the barriers to development, and to find champions in the community who are able to actively put forth the effort needed to create successfull transit-oriented developments.



ECONOMIC DEVELOPMENT

Anna Whitener
Corey Young



Economic Development

Introduction:

The Economic Development Focus Group team was tasked with assisting the City of Greenville in the development of a plan to revitalize the West Side by creating a point of reference for economic development issues for the city. This required us to review the current demographic, economic, and physical states of the West Side, review relevant literature for appropriate economic development strategies, meet with and discuss issues and ideas with the Economic Development Focus Group, and summarize strategies most suitable for the West Side.



S.W.O.T. Analysis

Before creating the plan, an analysis of the greater context of the community was necessary. Such analysis required a site visit, discussions with City of Greenville staff and internet searches to gain background information. After this information was collected, an initial SWOT analysis was performed to highlight the inherent strengths and weaknesses of the study area as well as opportunities and threats both within and outside of stakeholders' control. The results of the SWOT analysis are displayed below.

The West Side of Greenville boasts a close proximity to downtown; a state-of-the-art elementary school aimed toward science, technology, and mathematics education; and the Kroc Center. Unfortunately, the West Side struggles with an ailing housing stock and high unemployment. To overcome these struggles, the West Side must find a way to capitalize on its strengths and revitalize the district through its assets.

STRENGTHS	<ul style="list-style-type: none">• Proximity to CBD• Parks• A.J. Whittenberg• Amenities• Arts district	<ul style="list-style-type: none">• Transit• Community associations• Churches, CDCs, etc
WEAKNESSES	<ul style="list-style-type: none">• Slow construction• Ailing housing stock• High unemployment rate	<ul style="list-style-type: none">• Low owner occupancy• Few adult education opportunities
OPPORTUNITIES	<ul style="list-style-type: none">• Proposed BRT route• Proposed capital improvement projects• Expansion from downtown	<ul style="list-style-type: none">• Proposed park• Abundance of undeveloped or vacant property
THREATS	<ul style="list-style-type: none">• Developing pockets with no investment	<ul style="list-style-type: none">• Exclusion of residents from services

Case Studies

Using the SWOT analysis, 'sister' cities were identified to help develop an economic development plan. That is, the study examined other cities with similar challenges and identified the strategies they employed to overcome those challenges. Ultimately, this led to the study of four cities: Dubuque, Iowa; Washington, Pennsylvania; Tacoma, Washington; and Hopkins, Minnesota.



Street view of Dubuque, Iowa (kingme.com)

Case Studies: Washington, PA

Why Washington Was Selected:

Washington, Pennsylvania is much smaller than the city of Greenville but similar in size to the West Side study area with which this report is concerned. In addition, Washington also faces a number of problems with quality housing, shop front abandonment, and unemployment.

Components of the Washington Strategy:

The centerpiece of Washington's re-development effort was the city's capitalizing on existing infrastructure. Specifically, the city of Washington took advantage of an existing parking garage to become a regional transportation hub.

By re-routing public transportation to the parking garage and surrounding area, Washington is in the process of transforming a former eyesore into a thriving travel center. Residents from around the county now visit this spot en route to other destinations. While there, travelers take advantage of surrounding businesses such as convenience stores, coffee shops, and restaurants.



View of Washington Cityscape (City-data.com)



Washington Cityscape (Donnan.com)

Economic Impacts:

The transformation of the parking garage space into a regional travel hub has translated into increased patronage for local businesses and a revival of Washington's downtown area. This energy has reverberated up and down main street leading to greater economic development for the area.

Take Aways for the West Side:

Greenville could emulate this strategy by focusing on the existing Amtrak station in the study area. This would mean routing or re-routing some public transportation to Amtrak (such as the proposed BRT line), potentially creating a park and ride near Amtrak, and emphasizing the establishment of businesses which cater to travelers near Amtrak.



County Courthouse (Brittanica.com)



New Mixed-Use Space (Donnan.com)



Historic Mixed-Use Space (City-data.com)

Case Studies: Dubuque, Iowa

Why Dubuque Was Selected:

The City of Dubuque, Iowa is approximately the same size as Greenville, South Carolina. Furthermore, both cities share a number of cultural, historical, and physical characteristics. Perhaps the most striking of these similarities is the rich industrial mill heritage of both cities. It should come as no surprise, then, that a number of problems that both cities face are very similar. Dubuque, like Greenville, has been plagued with deteriorating housing and an ailing economy in many of its neighborhoods and the Millwork District.

Components of the Dubuque Strategy:

Dubuque employed a number of strategies in its revitalization efforts for the Millwork District. These strategies include: preservation and re-generation of the historic 'feel' of the district; creation of a number of civic spaces and performance venues; and an emphasis on programming to bring citizens (and businesses) back into the neighborhood.



Renderings from the Millwork District Development Plan (CityofDubuque.org)

Economic Impacts:

The attractiveness of renovations, return to the historic charm of the district, and a new vibrancy created by programming all helped to increase patronage for local businesses in the Millwork district. Therefore, business owners have since been able to expand, creating a hot spot for local activity.

Take Aways for the West Side:

The application of these strategies to Greenville would require the city to capitalize on strengths of the neighborhood and expand on the opportunities they present. Programming, again, is a key strategy here and the civic space provided by the proposed park in the study area would be the perfect vehicle to implement this strategy.



New Mixed-Use Space (Themunicipal.com)

Case Studies: Tacoma, WA

Why Tacoma Was Selected:

Tacoma, Washington is much larger than Greenville both in terms of geographic size and population. Despite these differences, the two cities are similar in that both have a presence of institutions of higher education close to the city center. The University of Washington, Tacoma has a significant presence in the city just as Clemson University, Bob Jones, Furman, and others have a significant presence in Greenville.

Components of the Tacoma Strategy:

Tacoma has used the university and its students to its advantage. The city meshed its campus into the surrounding city landscape. Thus, Tacoma integrated its student housing with other residential areas, provided services and businesses which cater to students, and made the city more livable in order to retain those associated with the university.



View of the Cityscape (Wikipedia.org)

Economic Impacts:

By integrating the University with the greater urban fabric, Tacoma has been able to increase patronage of local businesses and stabilize its housing. The energy associated with students and the university setting has also proved beneficial for the city's economy.

Take Aways for the West Side:

The West Side in Greenville has the potential to emulate the strategy of Tacoma and draw students to the area. The West Side could attract students with its affordable housing and establish businesses which would keep students and their money in the neighborhood. Examples of such businesses include coffee shops, clothiers, book stores, and restaurants.



University Downtown (SeattleTimes.com)



Downtown Student Housing (Tacoma.uw.edu)



Downtown Shopping (Tacoma.uw.edu)

Case Studies: Hopkins, MN

Why Hopkins Was Selected:

Although Hopkins, Minnesota is substantially smaller in size compared to the City of Greenville (~17,000 vs. ~70,000 in 2010 populations), the case focused on a small 1 mile by 1.5 mile area surrounding the proposed Blake Road light rail transit (LRT) stop. Thus, the study area is similar to the 1.65 square mile area surrounding three important transit corridors considered in the Connections for Sustainability grant. Additionally, Greenville's West Side has similarly become more diverse over the past ten years and is expected to continue this trend. Both sites are also fortunate to be located close to regional employment centers, regional trails, and major creeks. Similar to the West Side's high unemployment rate, the Blake Road Corridor was plagued with "some of the lowest job densities per mile in the city" (Costain et al., 2011).

Components of the Hopkins Strategy:

The Blake Road Corridor plan sought to capitalize on the area's diverse population and the unique businesses and employment opportunities they could provide. Additionally, the Blake Road Corridor plan emphasized the need for infrastructure that encouraged multi-modal transit, an increase in the mix of uses, and partnerships between citizen groups and the city, resulting in the Blake Road Corridor Collaborative.



Clock from Downtown (Jamguides.com)



Rendering of Cityscape (Hopkinsmn.com)

Economic Impacts:

Completion of the Blake Road LRT station is not expected to occur until 2018, yet results can already be seen from the planning efforts made there. Specific economic impacts have not yet been reported, but crime rates reportedly fell 25% from 2006 to 2010, sidewalks, parks, and gardens have been installed, and new businesses have filled many empty buildings.

Take Aways for the West Side:

Similar to the Blake Road Corridor population, the diverse mix of residents within the West Side study area provide an asset to the community. This diversity can perhaps be celebrated and recognized through the creation of unique businesses that meet a niche market demand. Additionally, the West Side could capitalize on the existing recreational resources in the community and enhance the current pedestrian networks in conjunction with transit-oriented development.



BRCC Logo (Hopkinsvolunteers.org)



Recreational Improvements (Blakeroad.org)

Focus Group: Meeting I

This was the first of two meetings with various stakeholders in the community. Below is a summary of this first meeting with information from the second meeting covered in a later section.

Our team met with the Economic Development and Policy focus groups on October 2, 2012 at the Kroc Center to review and discuss the aforementioned SWOT analysis and economic development case studies. The policies and strategies that garnered interest in their possible application to Greenville's West Side were noted as requiring further research. The three most prominently discussed inquiries related to business incubator spaces, artist studio and housing affordability, and identifiable corridor opportunities for each of the three corridors in the study area. Our team focused on the first two topics with initial findings detailed below.



The Kroc Center (uss.salvationarmy.org)

Business Incubators

Business incubators are sometimes identified with different titles (like business accelerator or innovation collaborative) and are created for various purposes, yet they generally have some common threads. Their main task is to serve start-up businesses with support services. According to the National Business Incubator Association (NBIA), 94% of them are run as non-profits, and 80% are sponsored by economic development organizations, government entities, academic institutions, or a hybrid of two or more of those bodies. Further, the President and CEO of NBIA has stated that a successful business incubator should have a clear mission, a hired manager, and broad support from the surrounding business community. The following examples of successful business incubators demonstrate several different approaches that have been taken and could possibly be applied to the market in Greenville's West Side.



Entrepreneurial Expertise

The Capital Factory, based in Austin, TX, partners selected start-ups with large target markets with three highly experienced and successful local entrepreneurs in exchange for capital stock in the new company. These businessmen/women each offer mentorship for one hour a week for ten weeks allowing the new entrepreneur to gain insights into successful (and unsuccessful) business processes, marketing strategies, and product generation techniques. Just as importantly, the advisors provide connections for the budding entrepreneurs that may last long after the ten week mentorship period. The networking component often leads to relationships with supply chain organizations, clients, and investors.

Take Away for the West Side:

The Capital Factory's structure is heavily focused on support from the existing local business community. This concept and the way in which they implement it through partnerships provides an example of how to organize a mentorship program within a West Side business incubator.



(Forbes.com)

Grant Funding

Another critical mechanism for implementing business incubators that should be considered is grant funding. Many funding organizations target projects that demonstrate potential to become self-sustainable and generate their own impacts after an award has been made. One remarkably successful implementation of this concept is the Fruitvale Public Market, a 7,000 square foot indoor and outdoor space for commercial ventures. The market represents a piece of the larger transit-oriented development (TOD) known as Fruitvale Transit Village, revitalized in response to the BART rail transit stop in Oakland, California. The construction of the market was completely funded through grants awarded to a local CDC, the Unity Council, and operating costs are now paid fully through rents generated by the development.

Take Away for the West Side:

The City of Greenville has demonstrated its great ability to obtain grants (one example being the “Connections for Sustainability” grant that is written about here). The Fruitvale example portrays the strength added to grant proposals when multiple parties are involved (The Unity Council, BART, and others). Greenville should continue to capitalize upon its ability to attract partners when considering grant opportunities and business incubation in the West Side.

Before



Fruitvale Market Before(PPS.org)

After



Present Fruitvale Market (unitycouncil.org)

Public-Private Partnerships

Many business incubators exist due to public-private partnerships, including technology and science focused incubators JumpStart and i2E, or Innovation to Enterprise. JumpStart was created through collaboration amongst northeastern Ohio's business, civic, and philanthropic communities in an effort to revive the area's economy after the hard-hitting 1980s downturn. The organization targets minority and female entrepreneurs and has directly generated and retained 1,544 jobs since 2005. I2E began in 1997 in response to an initiative by the Oklahoma Center for the Advancement of Science and Technology, a state agency. It has since generated noticeable economic impacts for the companies it has invested in and their respective communities. In the face of high unemployment rates nationwide, it is noteworthy that their portfolio of companies reported job growth rates 30 times higher than Oklahoma's rate of 1.3

These organizations demonstrate the capacity for public-private business incubators to generate economic development impacts, yet their industry focus is likely different than what will be created in Greenville's West Side. An example more closely related to the West Side's potential market



(Initialcall.com)



(Cleveland.com)

is witnessed in Pascagoula, Mississippi's Anchor Square development. The shopping destination consists of 16 small retail cottages situated along a boardwalk around a public green space. The project was the result of collaboration among the City of Pascagoula, Jackson County, Habitat for Humanity, the Gulf Coast Community Foundation and other partners. The cottages were built to cater to the needs of small boutique type shops, allowing for rents below \$300/month, even at above market rates.

Take Away for the West Side:

Greenville should continue to foster its goals of partnership by embarking upon joint ventures with the county, local businesses and other organizations in the community to generate such projects in the city's West Side.



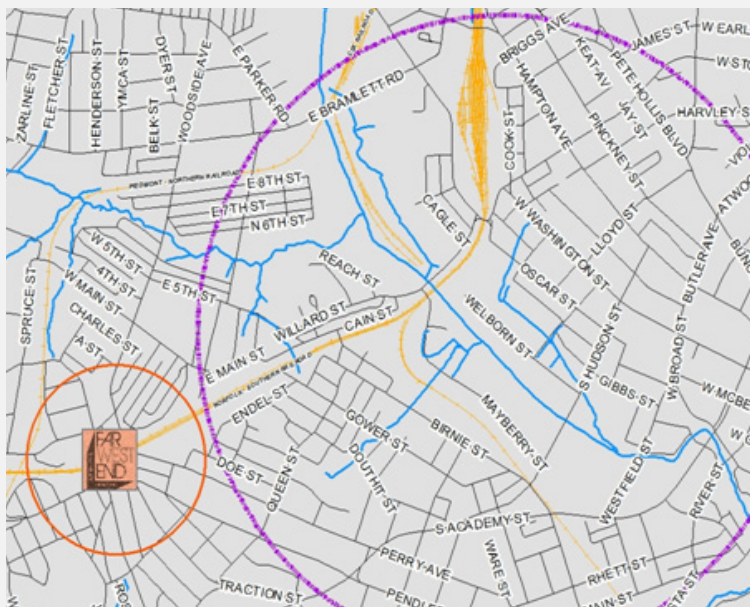
View of Shops (Cityofpascagoula.com)



Anchor Square Layout (Anchorsquare.com)

Artist Space

There are several approaches to offering affordable artist housing and studio work space that have been implemented in cities across the country. In addition to these approaches, there are some key strategies that aid in creating an environment conducive to organic growth of an artist district. These include zoning for mixed use, “branding” a designated area, offering online location services, and forming alliances. Greenville’s West Side is already primarily zoned redevelopment (RDV) and commercial (C-3 and C-4), each allowing for a mixture of residential and non-residential uses. A small area west of downtown has also been established with the “Far West End” brand, as seen in the map below. Similar to Charlotte’s NoDa (for North Davidson St.) area and Asheville’s River Arts District, Greenville’s Far West End serves as an identifier for residents and visitors alike. However, Greenville, and its West Side in particular, could benefit from creating an online space dedicated to helping artists locate available housing and studio spaces. Although this may be more likely to occur after several initial steps are taken to increase such availability in the area, an especially effective model to review for guidance would be the Paducah Renaissance Alliance Artist Relocation Program in Paducah, Kentucky. The West Side could also be influenced by strengthened alliances within the artist district and extending to the greater Greenville community.



Studioplex:

Studioplex is a building located in the Old 4th Ward of Atlanta, providing convenience to many amenities in the city. The complex houses both commercial and residential spaces, allowing flexibility and saving residents money and time getting to work (typically major deterrents for Atlanta residents). Studioplex supports art walks monthly through its ground floor open air breezeway (pictured in the top photo to the right), allowing tenants to network and display their current work. Additionally, the development has a website on which it allows current owners and prospective tenants to describe the types of spaces they wish to lease or rent, aiding the market process of matching supply with demand for the various units within the building. Further, the development has teamed with the Atlanta Development Authority and AmericaHomeKey, Inc. to offer up to \$50,000 in down payment assistance for those in need. This framework would suit Greenville's West Side if there were a particular building identified as capable of housing studio and residential space.

Take Away for the West Side:

Studioplex demonstrates how successful a project can be by providing private and public space, promoting regular events in the public space, providing tenants online platform for posting available properties and partnering with local community development organizations.



Courtyard for Displays (Gepdmc.com)



Living Space Option (atlantacondoloft.com)



Living Space Option (clickscape.com)

Hart Witzen:

Similar to Studioplex, Hart Witzen consists of one large building broken into smaller units. There is a large open gallery space in the center for displays (as shown in the top photo), surrounded by eighteen private studios along the periphery of the building (as seen in the bottom photo). The available studios differ in size and amenities to offer flexibility, yet each includes free wi-fi and utilities. This set up allows for shared space and costs, an effective way to provide affordable space in the thriving arts district of NoDa in Charlotte, NC.

Take Away for the West Side:

While Hart Witzen offers a prime solution to artist spaces, the layout of the building provides perspective on effective use of space. Additionally the reliance on regular gallery events to promote the resident artists, surrounding businesses, and the arts district itself is insightful.



Gallery Space (Rcbfashion.com)



Individual Studio (Hartwitzengallery.com)

Paducah Renaissance Alliance:

The city of Paducah, Kentucky has partnered with local Paducah Bank to provide strong incentives for redevelopment of dilapidated structures. They have been able to sell houses for as low as \$1 to local artists in exchange for bringing the property up to code. They additionally provide reimbursement of up to \$2,500 for architectural and professional services to do so. The Paducah Renaissance Alliance, in partnership with these other organizations offers further incentives for “sustainable” enterprises such as:

- Moving assistance up to \$2,500
- Start Up Business Assistance up to \$2,500
- Make Ready/ Rehab Costs up to \$5,000
- Acquisition Assistance up to \$15,000
- Restaurant Incentive up to \$25,000

According to a June 4, 2010 report by The Fiscal Times, “the city spent about \$3 million on the project in its first five years, while the artists themselves invested \$35 million in the neighborhood’s buildings”. The arts district then brought in \$27.8 million in 2007 alone.

Take Away for the West Side:

As mentioned in the focus group setting, a similar project focused on codes enforcement with incentives could work well to revitalize the abundant vacant and dilapidated houses of West Side Greenville and invigorate the artist community there.



Source: [Ci.paducah.ky.us](http://ci.paducah.ky.us)



Delapidated Facility (Switchboard.nrdc.org)



Revitalized Facility (Switchboard.nrdc.org)

Potential Funding Sources

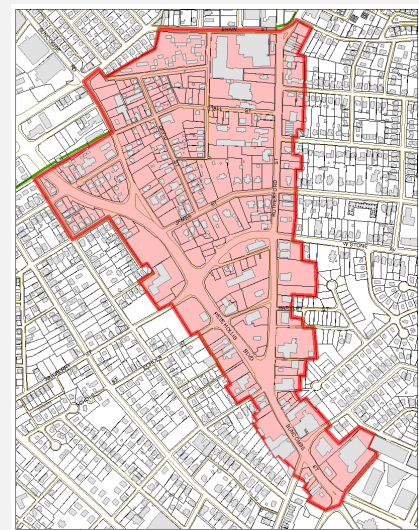
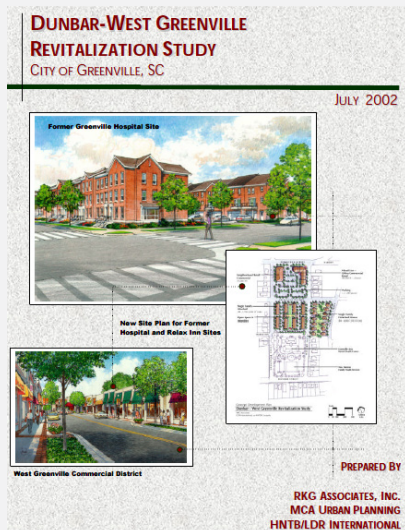
Artspace is a national organization devoted to “creating, fostering, and preserving” affordable artist space. The Metropolitan Arts Council is a Greenville non-profit similarly devoted to artists, but on a local scale and with a lesser focus on housing. Two possible funding sources for these two organizations are ArtPlace and the National Endowment for the Arts (NEA). ArtPlace is a collaboration of 11 national and regional foundations and six of the nation’s largest banks who often fund Artspace projects. The NEA, in conjunction with the City of Greenville is already a supporter of the Metropolitan Arts Council. This independent federal agency partners with state and local organizations and could possibly offer additional funding opportunities in the future.

In addition to existing funding sources, Greenville’s abundant entertainment venues offer the opportunity to create a trust designated to support the initiatives of creating and sustaining affordable artist spaces in Greenville, including the West Side. One successful example of such a trust is the Pittsburgh Cultural Trust. The Trust has become a major developer in its own rite in downtown Pittsburgh. As a unifying force, the Cultural Trust has not only funded a re-vitalization of its own venues, but also used its fundraising prowess to re-vitalize various other properties. The result is more than 100,000 square feet of renovated space ranging in use from civic to private and from commercial to residential. As the property manager, the Cultural Trust has been able to provide fledgling artists, studios, and organizations with a reasonably priced place to grow. A similar unifying force in Greenville could spur like re-vitalization as well.



Focus Group: Meeting II

In our second Economic Development and Policy focus group meeting, on October 25, 2012 a more general overview of economic development was provided. Following that discussion, several business incubator models and artists' studio space and housing programs were detailed to generate ideas for the West Side. We also heard from Bruce Forbes, with Sunbelt Human Advancement Resources (SHARE) about employment and training programs in the area that could be beneficial to the residents of Greenville's West Side communities. Finally, a mapping exercise was implemented to determine where attendees felt the boundaries of the study area should lie. Through this exercise and previous discussions, participants highlighted the need to identify opportunities for each of the three corridors in the study area. The three named corridors include Pete Hollis Blvd., West Washington St., and Pendleton St. Additionally, the Reedy River provides an informal corridor along which the Swamp Rabbit Trail currently exists. Our team found that the following corridor study recommendations that were related to our previous discussions and pertinent to future meetings.



Corridor Studies: Dunbar-WestGreenville

Dunbar-West Greenville Revitalization Study (2002):

This study of several West Greenville corridors contains a market analysis from 1987-1997, a land use analysis, and recommendations. Though the study is relatively outdated, some of the recommendations help us understand the changes that have taken place so far along Pendleton Street and parallel corridors near the West Side study area. The recommendations also provide some additional insights into what has been previously discussed and requested for the area, ultimately reducing duplicative efforts.

Relevant Recommendations:

- Re-use vacant space in West End
- Create incubator for professional services
- Create façade improvement loan program
- Create housing rehabilitation grant program
- Promote historic tax credits
- Diversify housing stock



West End Building (Greenville.gov)



Available Space along N. Markley and Wardlaw (Maps.google.com)

How the Recommendations Relate to Current Discussions:

Business incubation has been a major component of our planning considerations so far and the use of such a mechanism is supported by the following suggestions from the Dunbar-West Greenville Revitalization Study.

- Re-use vacant space along N. Markley Street and Wardlaw Street in Greenville's West End. There are opportunities for infill with small businesses if portions of the existing buildings are subdivided .
- Create professional services incubator in West End.

Artist housing has also garnered much thought throughout this process. Some highlights of the Dunbar plan that relate especially to the funding of such projects include:

- Creating a housing rehabilitation grant
- Promoting historic tax credits
- Diversifying the area's housing stock with options similar to what is proposed in the bottom photo
 - Using CDBG funds

Artist studio space has similarly generated much discussion. Likewise, the Dunbar plan recommendation to create a façade improvement loan program complements the previously referenced and extremely successful housing rehabilitation and artist relocation program implemented by the Paducah Renaissance Alliance. Possible façade improvements are depicted in the middle photo.



Dunbar Street Currently (Greenvillesc.gov)



Revitalized Streetscape (Greenvillesc.gov)



Housing Option (Greenvillesc.gov)

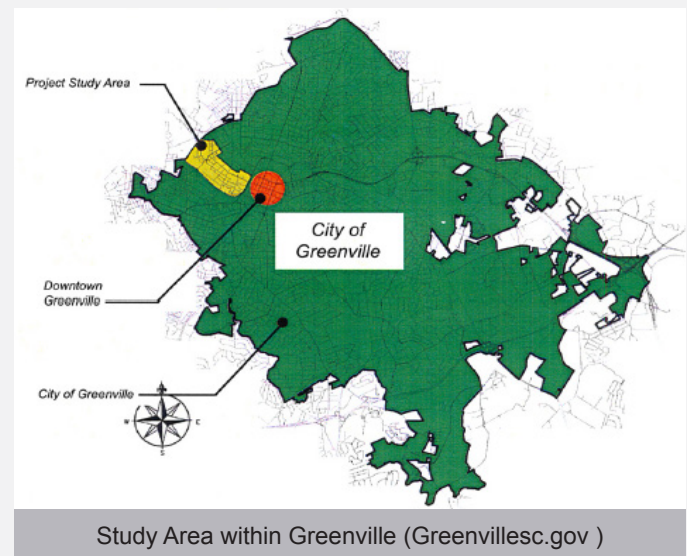
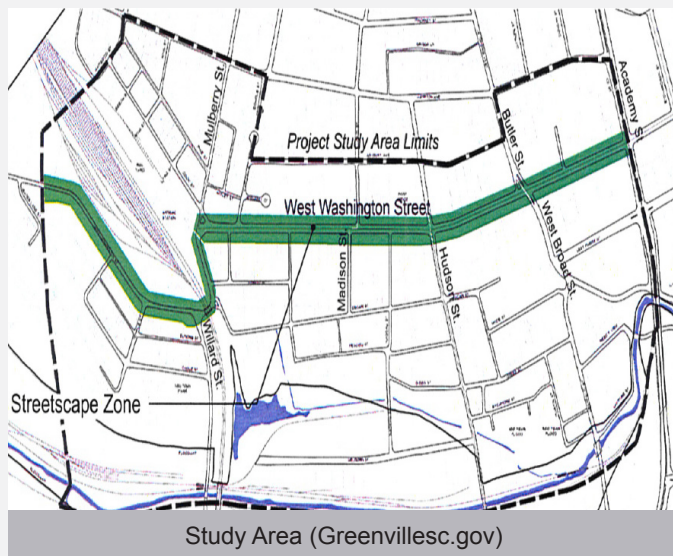
Corridor Studies: West Washington Street

West Washington Street Redevelopment Master Plan (2005):

This plan consists of a study of 294 acres in the northeast portion of our current West Side study area bound by Academy St, the Reedy River, city limits, and Asbury Ave (as pictured below). Initially, four master plan concepts heavily focused on land use were proposed. From those four concepts a consensus master plan was adopted.

Relevant Recommendations:

- Allow mixed-use development and infill (as rendered on page 103)
 - 25 acres of residential, commercial, and office uses
 - Incorporate an elementary school and municipal facilities
- Enhance business/light industry
 - 10 acre business park
- Implement open space requirements for future development
- Make appropriate use of floodplains
 - Create 47 acre Reedy River Park



How the Recommendations Relate to Current Discussions:

Transit-oriented economic development (TOeD) provided a major basis for the policy presentations and resulting conversations at our previous meetings. The West Washington plan recommendations for mixed-use and infill development along with those encouraging pedestrian safety and access coincide with TOeD development opportunities.

Another major component of the Connections for Sustainability grant is the proposed park surrounding the Reedy River. This park is an expanded version of the 47 acre Reedy River Park proposed through the West Washington Street plan. It is further supported by the Downtown Greenville Master Plan calling for “a city park upstream from Falls Park”. Additionally, the West Washington plan reiterates the importance of adequately planning for floodplain development, as has been discussed previously in our Economic Development focus group meetings.



Rendering of Streetscape Improvements(Greenvillesc.gov)

Corridor Studies: Pete Hollis Boulevard

Pete Hollis Gateway Plan (2006):

The study established a plan to make improvements to Pete Hollis Boulevard in Greenville, a corridor which the city considers a 'gateway' from the surrounding suburbs to Greenville City proper. The plan was created in 2006.

Relevant Recommendations:

- The establishment of a business license abatement incentive
- The establishment of a retail business loan program
- Façade improvements (similar to those pictured below)
- Minority Business Assistance

How the Recommendations Relate to Current Discussions:

Some of the goals and recommendations of the Pete Hollis Study are similar to those discussed here. Parts of the Pete Hollis Study focused on bolstering business start-up and retention efforts to ensure that the study area is vibrant. The study also focused on livability, which helps to further expand economic activity in the area.



Building Wall along Pete Hollis (Greenvillesc.gov)



Possible Façade Improvements (Greenvillesc.gov)

Conclusion:

The economic development group focused on celebrating and capitalizing upon the area's existing diverse population, corridors, mill heritage, association with higher education institutions, proximity to the CBD, mix of uses and amenities (A.J. Whittenberg, Kroc Center, etc.), and recreational opportunities. Options were identified for making artist housing and studio space affordable, promoting entrepreneurship through business incubation, and connecting residents to the rest of Greenville through the existing three corridors.

The case studies and research on artist spaces and business incubators elsewhere provide successful examples of what Greenville can do to promote change while utilizing the West Side's assets. Given participation and leadership, the West Side of Greenville can succeed as well.



Parks and Trails

W. Ryan Hall
Nicholas Holcomb

Parks and Trails

Parks and trails systems are often perceived as ancillary community features; however, a great park can be a catalyst that fuels the revitalization of housing and jobs. In addition, parks and trails can work with the transit system to achieve a connected transportation network and help to spur policies for open space designation. With such potential influence, planning for parks and trails is warranted for the creation, or re-creation, of healthy, vibrant, and environmentally conscious communities.

Defining parks and trails is necessary for understanding their role within the community. Parks have identifiable boundaries, are publicly accessible, and can be community gathering spaces that add aesthetic qualities to communities. Each of these concepts points to the utility of parks and trails in a community.



Falls Park in Greenville, SC brings people of all types together (Authors)

Types of Parks

There are numerous types of parks, each with variable service areas and purposes. The modern parks system has expanded to include a multitude of open spaces that all relate to an entire network of protected areas. From scenic country views to downtown tree-lined streetscapes, the modern parks definition allows for specialization.



The types of uses that these parks provide are critical in planning for park location and purpose in reference to the constituents in the surrounding service area. There are two primary types of uses in a recreational parks system: active and passive uses. Active park areas are characterized by formal fields, outdoor courts (basketball, volleyball, and tennis), picnic shelters, rest rooms, and event areas. Even in these areas, there will be times that passive activities can occur (e.g., when games or programs are not occurring, a softball field can be a passive place for kids to play or a couple to throw a Frisbee).

Passive uses traditionally include hiking, biking, walking, or even games being played in an open space (e.g., football played in an open grassy area). In reference to the matrix above, arboretum parks, heritage sites, downtown parks, and resources parks provide primarily passive uses (i.e., nature walks, wildlife/plant viewing, and social interactions). Parks that traditionally offer predominantly active uses are regional parks, which can provide basketball courts, softball fields, and other active uses. State parks and neighborhood parks often provide both passive and active sources to meet state and neighborhood needs respectively. Neighborhood parks, downtown parks, and regional parks have importance in West Greenville.

Benefits of Parks and Trails

The emphasis of uses is especially important with consideration of the environmental, social, and economic significance of parks.

Environmental:

Environmentally, parks and trails can act as hubs and spokes of a regional green infrastructure network. This means that natural areas can aid in water quality by allowing pervious soils to filter and capture flood waters and allow for human and wildlife travel corridors. Furthermore, by placing park spaces along riparian areas, flood hazards to properties and buildings can be avoided. Other environmental services provided by parks include improving air quality, capturing contaminants, and providing wildlife habitat.

Social and Health:

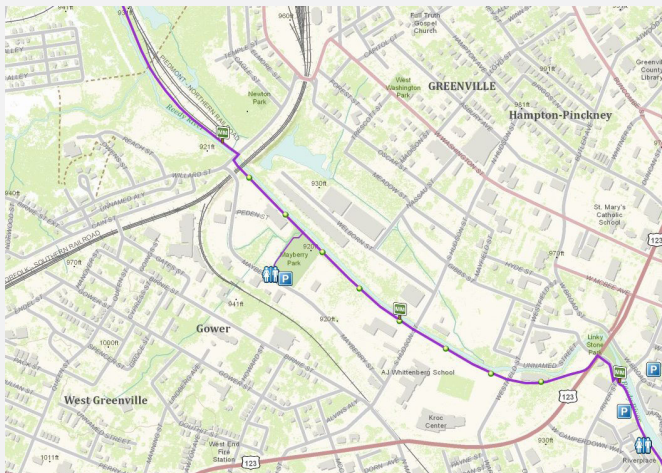
The social importance of parks and trails is evident through the fact that parks are social gathering places. Parks are often the site of large events, concerts, and festivals. Through connecting parks to other parks, neighborhoods and jobs, trails and greenways can also act to diversify the transportation options of a community. According to the Centers for Disease Control and Prevention, only 43% of

adults are highly physically active, and 25% engage in no leisure-time physical activity whatsoever. Connectivity of neighborhoods through parks and trails provides opportunities for exercise. Increased opportunities make people more likely to reap increased health benefits associated with parks and trails. These include weight control, reduction of heart disease, prevention and control of diabetes, and increased mental health, which are all associated with the passive and active recreational uses that parks and trails provide (americantrails.org). Health benefits tend to reduce the need for health care, which effectively reduces an individual's expenditures. Parks and trails create places for social gathering and exercising, which promotes community, healthy lifestyles, and financial savings.

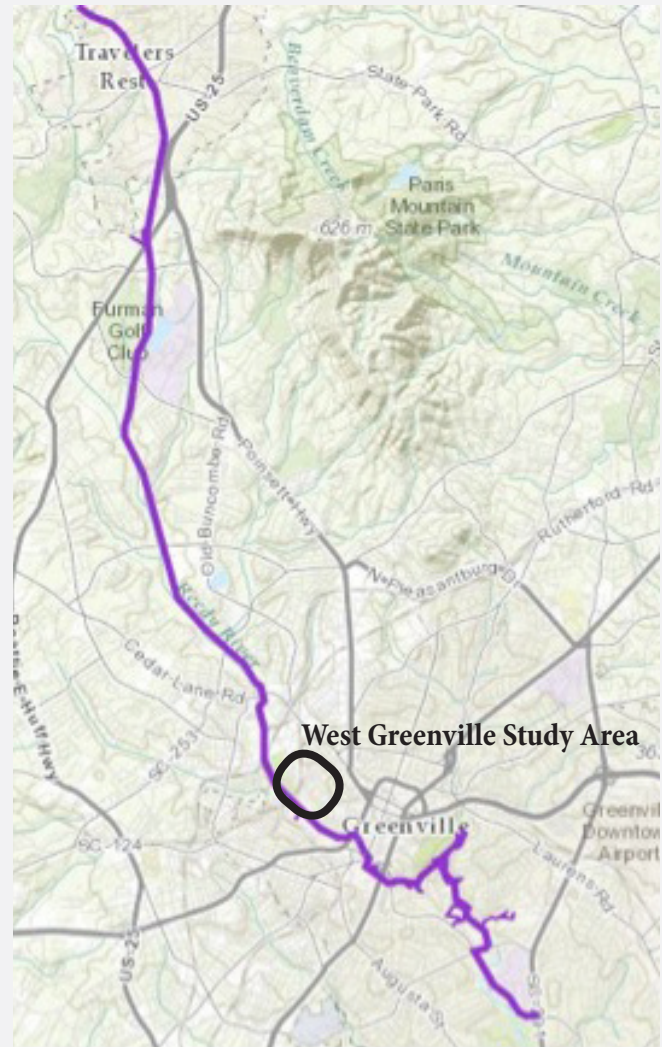
Economic:

Parks and trails can create positive economic benefits. A well-connected parks and trails system creates alternative passageways for community members to access job sources and shopping destinations. Provision of alternative transportation allows for job seekers without automobiles to access jobs that may have

been difficult to reach prior to the system of trails and parks. Additional economic benefits can come from the enhancement of or construction of a park. Well-designed and constructed parks (discussed in “Making a Successful Comprehensive Parks and Trails System” section) can spur development adjacent to the park, which means increased money-flow into the community. By understanding the importance of parks and trails to a community, as stated above, planners and citizens should be more willing to embrace parks and trails in planning for quality of life.



Swamp Rabbit Trail in West Greenville (City of Greenville)



The 17.5 mile Swamp Rabbit Trail (City of Greenville)

Parks and Trails in West Greenville

Existing Conditions:

Greenville's park system consists of several parks, ranging from small neighborhood parks to the 122 acre Cleveland Park. Overall, there are 39 city parks with more than 400 acres of park land within the city parks system. Specifically within the boundaries of West Greenville are: Linky Stone, Mayberry, Newtown, Pinckney Fludd, and Thompson Gardner parks. These parks were noted by the focus group to be very well-kept. These parks offer mostly active uses including baseball, basketball, and playgrounds.

The Swamp Rabbit trail is a great asset to West Greenville. This 17.5 mile multi-use trail, as seen in the image on the previous page, runs along the Reedy River from downtown Greenville to Travelers Rest, SC. The city plans to extend the trail south, for a total length of over 40 miles. This extension will further connect additional businesses, neighborhoods, and parks along the way. This trail is the primary artery of Greenville's trail system, and it is heavily used for recreation. Even though the trail is connected to downtown, West Greenville does not have adequate connections, partially due to lack of safety for pedestrians and cyclists. There are many reasons for safety concerns including: poor sidewalks, busy intersections, blind corners, and poorly lit areas. Clearly, bridging these barriers will better connect West Greenville residents to jobs and shopping destinations. Currently it has shortcomings for neighborhood connectivity, but the planning stage of connecting neighborhoods is underway.

Furthermore, trail users living within a 15 minute drive from the trail choose to drive to access points. This indicates that access to the trail is an issue, as even those seeking recreation are unable to walk or bike to the trail. To address this, focus team members suggested that the Swamp Rabbit Trail serve as the spine, with small trails creating "ribs" which would connect with the trail at important neighborhood nodes. These connections would be steps toward a more comprehensive parks and trails system.

Making a Comprehensive Parks and Trails System

In West Greenville there are two parks located along the Swamp Rabbit Trail – Newtown Park and Mayberry Park. With the addition of some connecting trails and a possible future park, there is potential to create a more comprehensive parks system. The Connections for Sustainability grant is allowing for neighborhood input on how parks and trail development can better serve the West Greenville community. This section outlines the components of a successful comprehensive park and trail system. A good park must be safe and secure, meet needs of community, well connected and well-maintained.

Safety and Security:

In order for parks to fulfill their potential they must be safe and secure places, where people feel comfortable. Of all the benefits offered by parks, if they are not properly looked after they can fall victim to crime, graffiti or vandalism. Even if parks are only perceived to have these problems, they can still reduce people visiting the park.

Safety was a concern for the West Greenville Parks and Trails focus team, and therefore

safety along the greenway and within the area parks should be a top priority. When considering basic features (water fountains, seating, bathrooms) along the trail safety must be considered. For example, a closed building could be used for criminal activities. When the community feels there is the possibility for these types of activities, they must be recognized by planners, designers, and builders for new access points and any future parks. However, there are ways to incorporate safety into the design of these features.

If the park is heavily used at all hours this will deter criminal activity. This relates to the Jane Jacobs' concept of 'eyes on the street,' where the presence of many people functions as self-policing which deters criminal and antisocial behavior. A well-maintained park also creates safety. If the park is poorly maintained and in disrepair it will suggest that it is vulnerable to attack and other acts of vandalism are likely to occur. A well-kept park signifies that vandalism will not be tolerated here.

The focus team was especially concerned about restrooms and their placement, which affects safety in the surrounding area. Locating restrooms near existing activities and police or fire stations accommodates for safety due to proximity to public spaces and law enforcement. Also, existing or future businesses could open their bathrooms to public use, which could increase customers as well. For design cost purposes, location of bathrooms near existing infrastructure (i.e., water lines, electricity, etc.) should maximize public utility and visibility in addition to reducing construction costs. Other design considerations include user privacy. Bathrooms must address privacy, but could be left open so that no criminal or unwanted behavior occurs inside the facility. Possible design features of an open bathroom are shown below.



Public restroom in a park (Victoria, British Columbia)



Open design for safety and privacy (Victoria, British Columbia)

Meeting Needs of the Community:

Parks are not one size fits all, but should respond to the needs of the community the park will serve. Safety was expressed by the community as a strong need, which must be present in this possible future park. The focus team also expressed the need to design parks specifically with amenities for teens and seniors.

Currently, a portion of West Greenville's needs are being met by the extraordinary facilities and programs held at the Salvation Army Ray and Joan Kroc Corps Community Center. There are a variety of recreational and community programs offered including: conference and banquet space, worship center, event rentals, performing arts events, state-of-the-art tennis complex, soccer complex, fitness center, and aquatics center. Most of these programs are geared toward the youth, but there is the ability for all to participate.

The Kroc Center's facilities and programs are not the only offerings in West Greenville. Another nation-wide organization with a site within West Greenville is the PGA's First Tee program. This program uses the game of golf to help develop life skills for youth, particularly those without access to traditional facilities. Additionally there is a community center that hosts meetings and events for neighborhood citizens.

Recognizing these existing programs, the parks and trails focus group made it clear that the community wanted to gear any new park design to suit the needs of teenagers and senior-citizens.



Primary Kroc Center facility
(SalvationArmy.org)



Kroc Center Tennis Facility (Authors)



Kroc Center Tennis Courts (Authors)

Amenities for Teens:

There are many examples of park programs for teens. It is up to the community what types of programs and activities they should provide for teens. The community could coordinate with Greenville's existing Youth Sports, Youth Civic Engagement, and Youth Commission – all currently offered within Greenville's Parks & Recreation system. Park facilities specifically designed for teens are much harder to come by. There are some unique examples from Europe showing areas that can be used by teens to fit their own needs (shown right).

It is important for teens to have informal hangouts they can claim as their own, but still be watched by adults. Youth sports are also ways to fit the needs of teens. The top sports for teens in order of popularity are football, basketball (1st for girls), baseball/softball, track & field, soccer, and volleyball. Providing space for these sports in parks is a great way to get teens actively involved in parks and recreation. This raises questions of whether the community would prefer organized programs with specific sites built for recreational sports, or if they would rather see open fields that

teens can adapt to fit their needs. The best answer is a comprehensive park system that has formal fields for specific sports as well as open fields for various sports is necessary. This variety helps account for the needs of the teenagers.



Amenities for Seniors:

There are no specific parks just for seniors, yet similar to teen programs there are a number of programs that are designed to fit the needs of seniors. Facilities like fitness rooms, indoor pools, indoor tracks, basketball courts, and game rooms are all community facilities that can be adapted to fit the needs of seniors at certain times, and then turned over to more active groups later.

Free tennis lessons, yoga instruction, and fitness walking across city locations are all types of senior programs that have been implemented by New York City's Park's Department. Indoor swimming pools can also be used to conduct aquatic programs designed for the elderly. Always popular are seating areas where people can gather to talk, play board games, or simply watch the world go by. If these tables and chairs feature built-in chess boards they are likely to become a hub of senior activity. It should be a priority to include some local seniors in the park design to get a feel for what it is they might enjoy in the park.



Yoga in the Park for Seniors (Cityparksblog.com)



Exercise Classes for Seniors (San Antonio Parks & Rec)

Well-Maintained and Well-Designed:

Parks need to respond to the needs of a community. The needs of the community need to be addressed throughout the design process, and the final design must respond to the culmination of community needs. The overall character of the surrounding neighborhood must be preserved and accentuated by the design, while still providing memorable spaces that will only become better over time. Design features that identify the park as a meeting place should represent different neighborhoods of the area (i.e., Pickney Fludd, Southernside, and West Greenville neighborhoods).

Maintenance should be an ongoing effort between the Parks & Recreation department and the community citizens. A cleaner park will attract more visitors, thus making the park safer. Community involvement and care through neighborhood events and trash clean-ups in the park should instill a sense of community pride in the park and create a situation where citizens take ownership of the park. Building a sense of place can be achieved by providing alternatives to barriers restricting access to the park and exploiting existing opportunities.



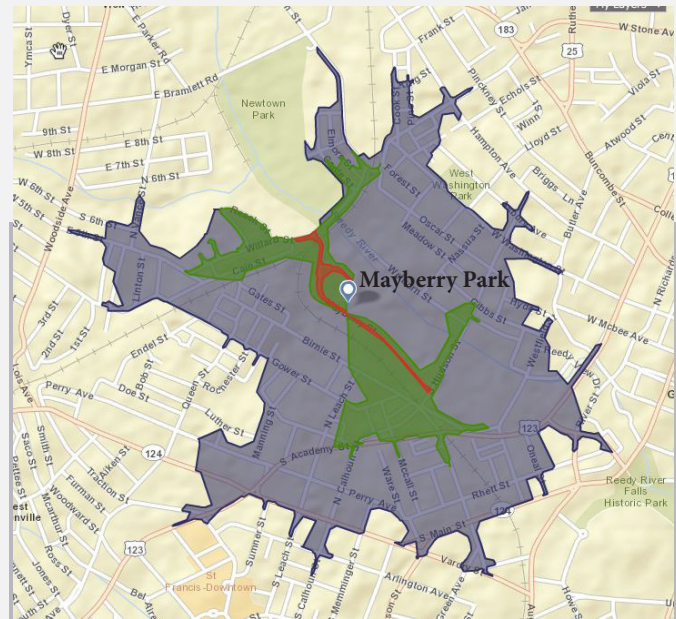
Well-designed soccer field and landscaped storm-water retention area, Kroc Center (Authors)

Location, Accessibility, and Connectivity:

Three important tightly-linked concepts are location, connectivity, and accessibility. These terms refer to placement of parks and trails within communities. Location of a park is very important for a community as it can dictate the predominant users. The proposed park site near Mayberry Park is centrally located in the boundaries of the West Greenville study area but may create access issues for area residents. Residents of West Greenville do not heavily use Mayberry Park and the Swamp Rabbit Trail due to accessibility issues, such as poor connections and low automobile ownership. Since a larger percentage of West Greenville residents do not own automobiles compared to the rest of Greenville, walking, bicycling, and public transportation are the primary modes of movement for many area residents and thus should be considered for park access. Particularly important for parks and trails is accessibility by walking or biking. Access points for the Swamp Rabbit Trail and Mayberry Park are limited for pedestrians and bicyclists. While the



Hudson Street access to SRT lacks sidewalks (Authors)



Estimated five, ten, and fifteen minute walk times to Mayberry Park (ESRI Business Analyst)

trail crosses several streets in or nearby West Greenville, sidewalks and bike lanes may be inadequate to meet safety needs.

The image on the previous page shows the Swamp Rabbit Trail crossing Hudson Street near the Kroc Center. One side of the street has sidewalks, while the other does not. Also, bicyclists do not have protected bicycle lanes and must share the road – sharing the road seems to be commonplace throughout West Greenville. The authors rode the streets and the Swamp Rabbit Trail on bicycle in the area at non-peak hours for traffic. Hudson Street seems to offer enough space for bicyclists



The railroad creates a barrier along Willard St. (Authors)

as long as automobile drivers are alert. Bicycle and pedestrian access on Hudson Street seems to be better and safer than on Willard Street from the Swamp Rabbit Trail to Washington Street, as seen in the picture below.

In the Willard Street photo below, there are no bike lanes or sidewalks to connect Newtown Park – the wooded area to the left – or West Washington Street. Cars travel at a relatively high rate of speed along this stretch of Willard Street, reducing the safety for and likelihood of use for pedestrians and bicyclists. To access Willard Street from the north, one must travel down West Washington Street as pictured on the next page. The narrow sidewalk and sharp turn make this an uneasy passageway for cyclists. In addition, residents expressed safety concerns due to the poor lighting of this passage.

Also, a lack of sidewalk infrastructure makes walking stressful. This underpass limits non-motorized access to nearby Newtown Park and the Swamp Rabbit Trail at Willard Street as seen in the image to the left. This is a perfect

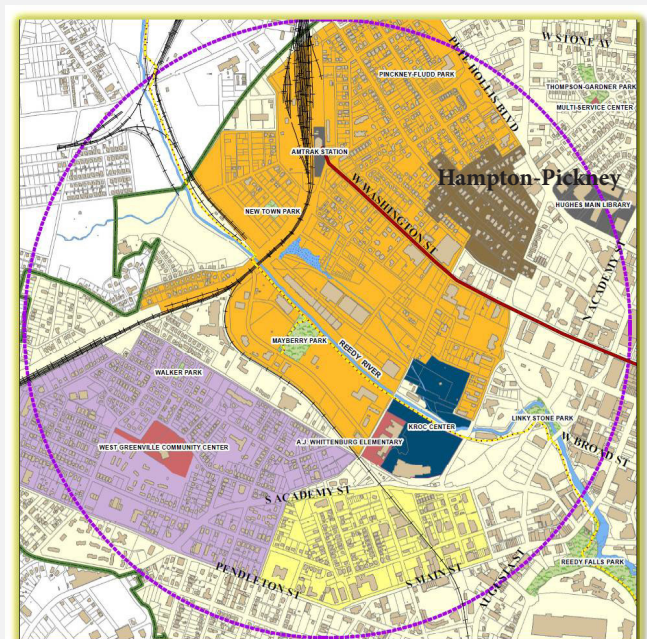
example of the two converging concepts of connectivity and accessibility working together. Even though West Washington Street and Willard Street provide connectivity to the Swamp Rabbit Trail and Mayberry Park, accessibility is limited to those with automobiles.

Connectivity in relation to parks and trails is defined as linkages of parks and trails to neighborhoods, businesses, parks, and shopping destinations. The Swamp Rabbit Trail, as it exists today, connects numerous neighborhoods throughout Greenville and even connects multiple cities. However, there are many neighborhoods that have poor

connectivity to the trail by multiple modes of transportation. For instance, the Hampton-Pickney neighborhood (as pictured below) has restricted connectivity and access to the Swamp Rabbit Trail because railroads and Academy Street force pedestrians and bicyclists to travel greater distances.



Underpass at Washington St. limits cyclist safety (Authors)



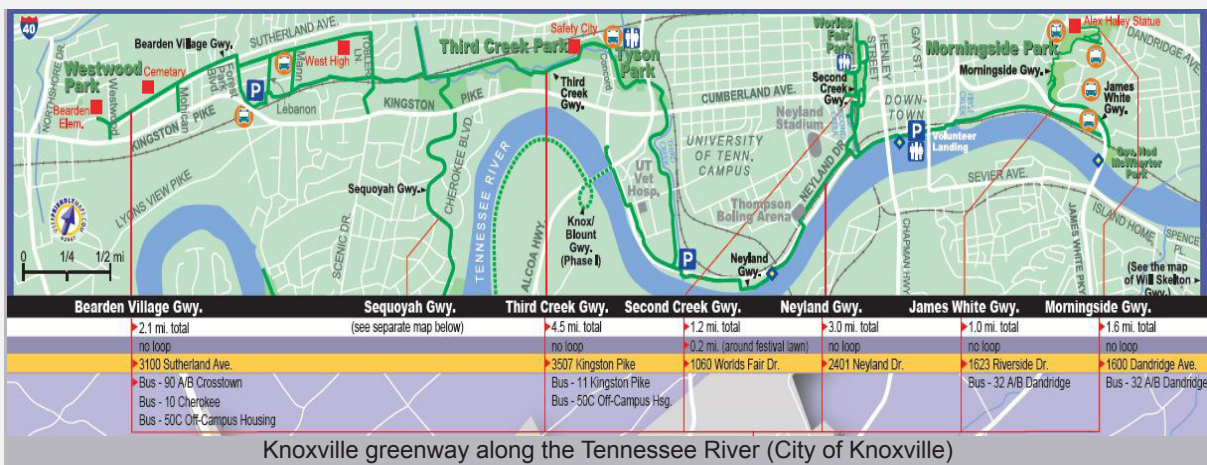
West Greenville Study Area (City of Greenville)

Connectivity Cases

Knoxville, TN:

Case studies of other cities that have integrated parks and trails systems are essential to help understand the status and possible remedies for issues in Greenville. Knoxville, TN is a great example of creating a connected system with access for all citizens. Knoxville has achieved a well connected network of parks and trails by locating bike lanes, bikeways, and shared roads to create a fluid bicycle travel system. Access to Knoxville's greenway system is

enhanced not only by bike lanes and pedestrian infrastructure but also by the fact that every park with a trail has its own bus stop as seen in the image below. Accessing businesses, retail and other neighborhoods has improved with their integrated greenway, transportation, pedestrian, and bicycle planning. Applicability to Greenville would be the creation of bike lanes and bus stops at parks and other access points for the Swamp Rabbit Trail.



Minneapolis, MN & Boston, MA:

Other examples of cities that have integrated their trails and parks for the purpose of connecting neighborhoods and businesses are Minneapolis, MN and Boston, MA. Minneapolis's greenway system successfully connects neighborhoods to other important areas of the city. This led to several apartment developments crowding adjacent to the trail – further improving accessibility. Boston has, through the “Big Dig,” connected neighborhoods with downtown Boston – a hub for jobs, entertainment, and retail. In Boston, it is now much easier to access downtown via non-motorized transportation. In application to



Housing along greenway in Minneapolis (tcdailyplanet.net)

Greenville, the SRT does a great job of connecting areas along the trail to its vibrant downtown. Additionally, retail sources are popping up along the trail to provide trail riders with goods they demand. The Swamp Rabbit Café and other retail sites have emerged to meet the needs of trail-goers. Further expansion of trail-based businesses could provide an additional job source for a limited number of West Greenville residents. However, ancillary trails connecting neighborhoods to the SRT would need to be built for West Greenville to realize this opportunity. One example of a complete network of connected neighborhoods, is Seattle WA.



Rose F. Kennedy Greenway, Boston, MA (archpaper.com)

Seattle, WA

A volunteer coalition group has formed in Seattle for the sole purpose of connecting the regional greenway system to each neighborhood (seattlegreenways.org). The volunteer group, known as Seattle Neighborhood Greenways, relies on a small group of neighborhood residents to come forward and take ownership of their neighborhood. Being part of the entire coalition allows for increased lobbying for connectivity city-wide and gives power to the neighborhoods for connecting trails, bikeways, and separated paths into the neighborhood. In response, the city of Seattle has created a matching grant fund to allow for creation of connector trails and parks. While Seattle's example may be on the extreme side for application in Greenville, there are certainly some take-home points. Having pride in one's neighborhood and displaying one's opinion in a public forum has merit. Also, reflecting the character of the community along the trail is an easy application to West Greenville.



Freemont Troll in Seattle displays the unique character of the neighborhood (Maria Garcia)

Opportunities

The Parks & Trails focus group has addressed a multitude of opportunities to increase access to parks and trails and serve needs of their facilities.

The focus team put forth the idea of each neighborhood connecting to the SRT and forming a 'neighborhood node,' complete with bathrooms, water fountains, and seating. This will allow each neighborhood to take ownership of their section of the SRT, but involves planning and design work. Public art is one way that these nodes can be adapted to reflect the character of the neighborhood itself. These nodes will increase access from the neighborhoods to the SRT. Also, bathrooms and other facilities will make the trail more convenient, especially for families with children. The West Greenville focus group should also be considering the

optimal location of their neighborhood node or nodes. It can be incorporated into the design of a new proposed park, or build off existing centers in the community, such as the Kroc Center, West Greenville Community Center, A.J. Whittenburg Elementary School, etc.

Showing a lack of neighborhood connections, a Furman University study found that although the majority of trail users live within 15 minutes of the trail, the majority drives to trailheads to access the SRT. An active population seeking recreation is capable of cycling or walking to the trail, however, they feel it is unsafe or uncomfortable so instead choose to drive. This indicates a need to improve the connections between neighborhoods and the SRT. The focus group has identified barriers



SRT access point at Furman University provides an informational kiosk, a restroom, and character (Authors)

for pedestrians wishing to access the trail in their neighborhood. This includes the Willard Street underpass, the railroad, and 4-lane Academy Street. In many cases there are multiple options in terms of addressing these barriers and finding alternative solutions.

Some potential solutions may include a connection through Newtown Park and building connections by the railroad underpass at the end of Welborn St. The focus group and community can decide on a route or routes that are best-suited to connect to the SRT. When resources allow, these routes can be improved in terms of sidewalks and bicycle lanes. Additionally, bus stops near trail access points would extend accessibility to the entire population. The SRT is a great



Businesses opportunities along trail connections (Authors)

pedestrian and bicycle highway that connects much of the region to downtown Greenville. Clearly, the next progression of Greenville's greenway development is for smaller linkages into neighborhoods.

The focus group has expressed that the SRT is not used by many residents because they have no time for recreation. This ignores the fact that the trail can be used for utility purposes, (i.e., connecting people to jobs). The trail connects to job centers in downtown Greenville and Furman University. It is unclear how these jobs are suited to the skill set of those within West Greenville, which warrants future research.

As the growth of downtown continues outward, buildings should take the cue from the greenway oriented development, (ie., Riverplace near Falls Park). There is also a place for local entrepreneurs to open businesses along the SRT. Businesses could use the trail to funnel in customers from the local area, trail users, or overflow from downtown. They would be in a position to have lower rent costs and perhaps use the SRT to draw some customers from expensive downtown shopping.

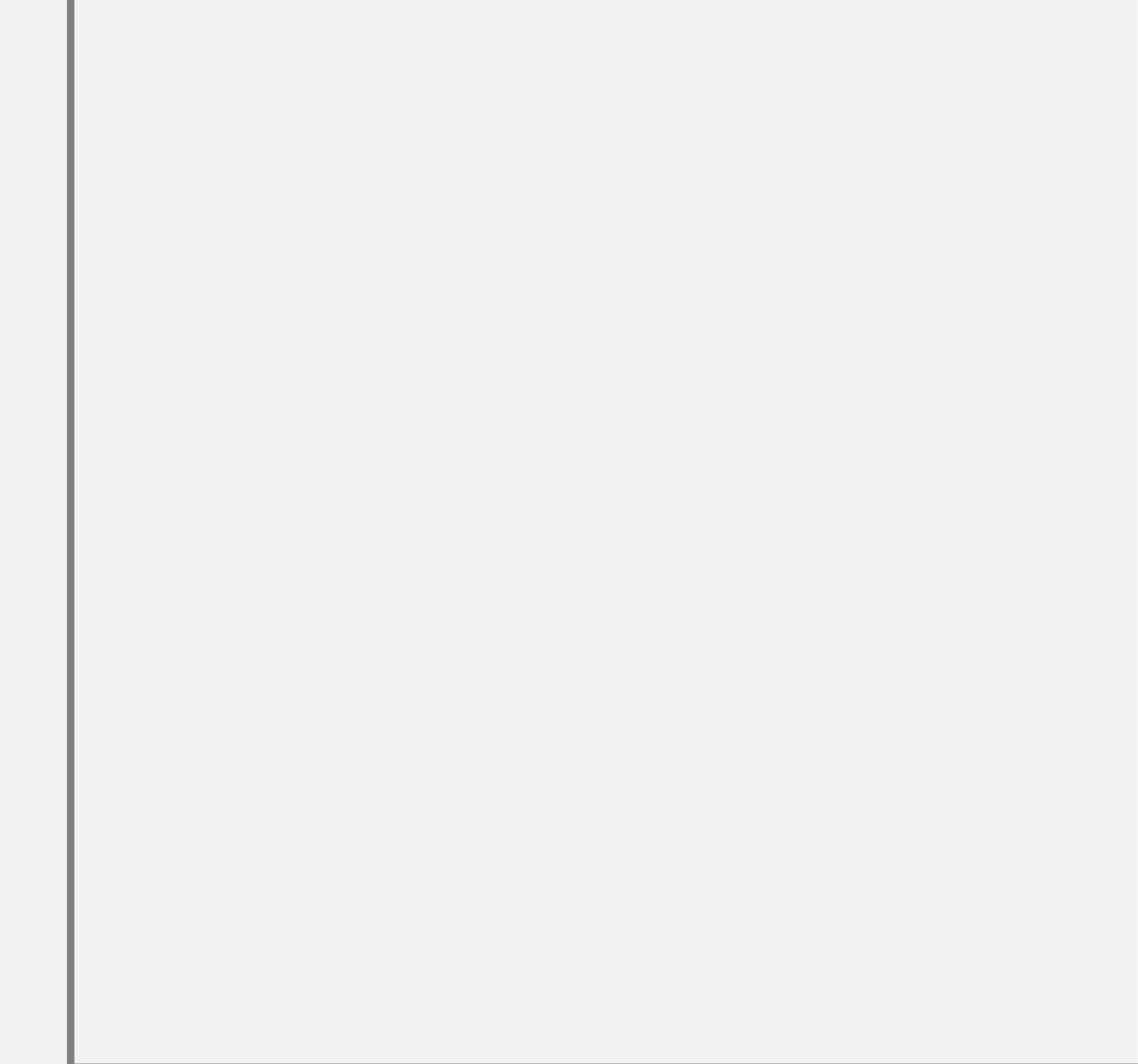
Conclusion

Parks and trails provide numerous benefits to the environmental, social, and economic fabric of a community. West Greenville contains a nice system of parks of trails. Greenville's Swamp Rabbit Trail is a key linkage that runs through the West Greenville study area to which future parks, businesses, and residences should connect. West Greenville currently has limited connectivity to the trail; however, through this grant and the proposed park, increasing connections can be addressed. Strengths in the Greenville parks and trails system, such as being well-kept places for recreation, are great to work from to expand connections. Recreation, however, is only one of the intrinsic opportunities that exist from the Swamp Rabbit Trail and parks system.

Focusing on integrating key points from the community into the existing parks and trails system adds additional economic and social values to West Greenville and beyond. Additionally, applying the four main aspects of a successful comprehensive parks and trails system (i.e., safe and secure, meets the needs of the community, location and connectivity, and well-maintained & well-designed) will aid West Greenville in revitalization of the entire community. Furthermore, following the precedents from Knoxville, Minneapolis, Seattle, and Boston, Greenville can spur economic and housing growth in addition to providing a multi-modal transportation system via bus stop and parks/trails coordination.



With the Connections Grant in motion, the future of Mayberry Park is limitless (Authors)



Connections for Sustainability: Final Thoughts

As part of the City of Greenville’s “Connections for Sustainability” grant initiative, five focus groups, each with two student facilitators, were created to assist in generating ideas for the following areas of study and discussion:

- Housing
- Transportation
- Policy (Transit-Oriented Development)
- Economic Development
- Parks and Trails

Each of the teams presented relevant findings and information at meetings, generated discussions, noted questions and concerns, and further elaborated on identified topic areas to produce more conceptualized visions for advancing the “Connections for Sustainability” goals. The unique findings from each group are detailed below. Finally, connections are made between each of the groups’ conclusions to highlight areas of consensus and help direct future endeavors by the City of Greenville.

Housing:

The housing focus group highlighted and expanded upon strategies identified for the area through recent studies. These included the use of tax incentives, historic building credits, and a recapture clause for city-funded developments, as well as the opportunity to generate support from non-profit organizations and local banks. Additionally, the community building was recognized as deserving primary attention.

Transportation:

The discussions at the transportation meetings focused on the feasibility of a successful transit system. Highlighted were the need for improvements to existing service and routes to meet the needs and wants of potential riders. These included reducing wait times (Greenlink currently makes hourly stops) and nicer and more consistent amenities (benches, bike racks, shelters, etc.) at the stops. The team noticed that turnout at the meetings was relatively low and additional community interest in the subject could be generated as the city shows an increased willingness to invest in such services. One of the main issues addressed concerned accessibility and the option for implementing a bus rapid transit line to connect residents to the other side of the city.

Policy (Transit-Oriented Development):

The policy discussions centered on the need to continue implementing updated design guidelines and progressing on development standards for transit-oriented development transitional zoning areas, particularly along the West Washington corridor. There was a specific focus on creating a pedestrian-friendly environment through these mechanisms. Additional comments identified the desire for promoting mixed-use developments in the area and enhancing connectivity within and extending from the West Washington corridor.

Economic Development:

The economic development group focused on celebrating and capitalizing upon the area's existing diverse population, corridors, mill heritage, association with higher education institutions, proximity to the CBD, mix of uses and amenities (A.J. Whittenberg, Kroc Center, etc.), and recreational opportunities. Options were identified for making artist housing and studio space affordable, promoting entrepreneurship through business incubation, and connecting residents to the rest of Greenville through the existing three corridors.

Parks and Trails:

The parks and trails team generated discussion surrounding the need to build upon existing physical and community strengths to connect with the larger parks and trails system of Greenville. The following four characteristics were ultimately proposed as guidelines for a successful comprehensive parks and trails system for the West Side:

- Safe and secure
- Meets needs of community
- Convenient location, connectivity, and accessibility
- Well-maintained and designed

Participants identified that such a system could help achieve goals of economic development, recreational opportunity enhancement, and healthy lifestyle promotion.

Making the “Connections”:

The title of this grant, “Connections for Sustainability”, is indicative of the themes that are reflected in each of the focus groups’ findings. Creating options for all modes of transportation, enhancing connectivity within and extending from the area, promoting a mixture of uses, and capitalizing on the existing corridors (Pete Hollis Blvd., West Washington St., Pendleton St., and even the Reedy River) were all goals identified to some extent by each focus group.

Additionally, each group recognized the need to garner public support for projects, be realistic in expectations, and partner with other organizations. Moving forward, the city should likely focus on promoting and possibly incentivizing mixed use development along the outer two corridors (Pendleton St. and West Washington St.) while making neighborhood connections between those corridors with enhanced pedestrian facilities, transit routes, revitalized housing, and recreational spaces.

